

NEW URANIIDAE, DREPANULIDAE AND GEOMETRIDAE  
FROM BRITISH NEW GUINEA.

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THE species described in this paper were all obtained by Mr. A. S. Meek at the Upper Aroa River, British New Guinea, from the end of January to the beginning of April 1903, at an altitude of 4000 feet and upwards.

FAMILY URANIIDAE.

SUBFAMILY EPIPLEMINAE.

*Cirrhura* gen. nov.

*Forewing*: costa straight, becoming convex before the rounded apex; hindmargin straight, oblique; anal angle well marked; inner margin straight.

*Hindwing*: kite-shaped; apex rectangular; anal angle obtuse; hindmargin at vein 4 with a fine slightly depressed tooth, the margin above it straight, below it to anal angle sinuous.

Antennae (♀) lamellate, formed of short clavate teeth, but these not well separated till towards apex; palpi short, narrow, porrect slightly upward; tongue present.

Nervation: forewing, cell hardly one-third of wing; discocellular fine, slightly concave outwards; first median nervule at two-thirds, second and third from lower end of cell; vein 5 from upper end of cell, whence also the stalk of 6, 7; 8, the stalk of 9, 10 and vein 11, all three near together from about one-half of cell; 9 anastomosing near cell with 8 and not separating till near costa: hindwing, cell two-fifths of wing; discocellular very fine, oblique, angled outwards in middle; 6, 7 and 3, 4 from angle of cell; 5 from the angle of discocellular; 2 at three-fourths.

Type: *Cirrhura cometifera* spec. nov.

Nearest to *Orudiza* Wlk., but abundantly distinct.

1. *Cirrhura cometifera* spec. nov.

*Forewing*: purplish grey, thickly and regularly striated with darker grey; costal edge whitish, with short blackish marks; lines brownish fuscous; first from one-fourth of costa to two-fifths of inner margin, straight; second from just beyond middle of costa to three-fourths of inner margin, nearly parallel to first line, but slightly nearer on inner margin than on costa; the first preceded, the second followed, by a narrowly paler space; cell-spot brown, indistinct; submarginal line waved, very indistinct, indicated by 3 brown scarcely conjoined spots obliquely below one another in a line pointing towards apex below veins 7, 6, 5, with another nearer margin below vein 4; hindmargin darker tinged; fringe pale grey, with darker middle line.

*Hindwing*: with a double brown outer line with pale centre, from two-thirds of costa to four-fifths of inner margin, forming a bluntly-rounded projection towards hindmargin between veins 4 and 3, then sinuous; on discocellular an oblique brown

mark thickening downwards, below vein 5 trailing off into a double tail of black and white scales running into the projection of outer line : outer line edged by a space of lilac grey scales, broader on costa and inner margin, followed by more distinct blackish striae ; hindmargin from apex to tail narrowly white preceded by a deep black line which curves out above the tail ; below it a white dash, running out and fringing the tail below ; below the base of tail a roundish drop of purplish and dark brown scales, with a shallow lunule nearer anal angle, both finely edged with white and dark scales ; fringe grey, with base darker than the tips.

Underside dull cinereous, indistinctly striated.

Face and palpi black ; vertex and base of antennae snow-white ; thorax and abdomen pale grey ; legs paler ; all the tarsi and fore- and midtibiae brownish.

Expanse of wings : 30 mm.

1 ♀.

In outward appearance this species bears a very marked resemblance to several South American species.

### 2. *Epiplema inquinata* spec. nov.

*Forewing* : white, with exceedingly fine and delicate black dots and striae, and with three curved stains of greyish brown, all very faint and narrow towards costa, but broader along inner margin, emphasised by fine black dots, especially on inner margin ; the first at about one-fourth, the second just beyond middle, the third at five-sixths ; the last two are curved outwards above, and the last ends in a black blotch before anal angle ; a minute spot of black scales beneath apex ; an extremely fine ochreous marginal line ; fringe white.

*Hindwing* : with the two outer stains and an additional slight marginal one below middle ; a black dot in cell near base and a more minute one below base of lower tooth ; marginal line very fine ; fringe whitish.

Underside all white.

Head, thorax, and abdomen white ; tips of palpi and inside of foretibiae and tarsi alone fuscous.

Expanse of wings : 24 mm.

3 ♀♀.

Allied to *E. denigrata* Warr. from the Trobriand Islands.

Hindmargin of forewing entire ; of hindwing with fine tails at veins 4 and 7 ; inner margin of forewing sinuate.

### 3. *Monobolodes ustimacula* spec. nov.

*Forewing* : ochreous tinged with fawn-colour, minutely grey-speckled ; costa slightly darker ; an interrupted black-brown erect shade from inner margin just before middle, not plainly reaching the costa, but apparently curved inwards towards it ; a thick black erect line from three-fourths of inner margin reaching vein 6, followed by first a narrow rust-coloured line and then another blackish one, the anal angle occupied by a purplish black blotch ; a submarginal series of small black dots from apex to anal angle ; the marginal stripe darker and ferruginous-tinged ; fringe with a pale shining base, and chequered along the tips with black.

*Hindwing* : black-brown, except a narrow ochreous streak from base through cell widening to hindmargin between veins 4 and 6 ; crossed by two parallel curved black rusty-edged lines, antemedian and postmedian ; a row of small black marginal lunules on a paler ground ; fringe black-brown.

Underside yellowish ochreous, dark leaden grey towards the hindmargins.

Face and palpi, tips of patagia, metathorax and abdomen black-brown; shoulders and patagia rufous ochreous; vertex and antennae snow-white; abdomen beneath and legs ochreous; forelegs in front brown-black.

Expanse of wings: 19 mm.

1 ♀.

The whole surface of the wings is somewhat glossy, and the dark shades in certain lights have a plumbeous reflection.

#### 4. *Phazaca erosioides* Wlk.

In Nov. Zool. iii. p. 278, I described an *Epiplema undulata* from Fergusson Island, the specimen being a ♀, remarking that it was much like Walker's Bornean species *Phazaca erosioides*, except that this had an almost white hindwing. Among the *Epipleminae* lately received from A. S. Meek collected on the Upper Aroa River, British New Guinea, I find 2 ♀♀ of *E. undulata* and 1 ♂ of *Phazaca erosioides*, the latter a very strongly marked dark example; and there can be small doubt that, different as the sexes appear, they yet belong to one and the same species. In neuration *Phazaca* agrees with *Epiplema*, vein 5 of the forewing rising from the upper end of the cell at the same point as the stalk of 6 and 7, and veins 10 and 11 both rising from the cell; but the ♂ to a certain extent simulates the ♂♂ of *Dirades*, the hindwing being rounded, with a small insignificant tooth at vein 7 only, and the space between veins 1 and 2 devoid of colour and pattern, though without any pencil of hairs; the ♀♀ likewise have only a slight projection at veins 4 and 7. In both sexes the apex of forewing is rounded, and the hindmargin nearly straight, while their style and pattern of markings is strongly suggestive of *Dirades*. The ♂ antennae have closely placed clavate teeth. The ♀♀ have been redescribed by Swinhoe as *Epiplema kohistaria* from Port Blair, Andaman Islands, cf. *Ann. Mag. N. II.* (7). ii. p. 307 (1900), though by a misprint they are recorded as ♂♂. The full synonymy will be as follows:—

*Phazaca erosioides* Wlk., xxvii. p. 21 (♂) (1863).

*Epiplema undulata* Warr., Nov. Zool. iii. p. 278 (♀) (1896).

*Epiplema kohistaria* Swinh., l.c. (1900).

#### *Pterotosoma* gen. nov.

The ♂ is like *Epiplema* in the neuration and general shape of forewing; the hindmargin quite as long as the inner margin, slightly protuberant in middle and faintly indented beyond cell; but the hindwings agree with the ♂ of *Dirades* in neuration and in the possession of an inner marginal fold and pencil of hairs; the inner margin is shortened, and the hindmargin irregularly erenulate throughout, with a more prominent tooth at vein 7, as in *Monobolodes*. The pencil of hairs rises from the extreme base of wing, and is as long and conspicuous as in the ♂ of *D. onusta* Warr. The main characteristic is an appendage of rough scales enveloping the basal segments of the abdomen beneath, and produced on each side in the form of a tuft of hairs reaching nearly to apex; the costa of hindwing is evenly curved throughout, and the inner margin of forewing straight.

Type: *Pterotosoma bilineata* spec. nov.

5. *Pterotosoma bilineata* spec. nov.

*Forewing*: lilac-grey, slightly dark-speckled; the lines rusty-brown; the first from one-third, and the outer nearly from two-thirds, of the costa, below which they are somewhat curved, then vertical and parallel to each other to a little beyond one-third and two-thirds of inner margin respectively, the outer with a short projection below vein 4; a bilunate brown blotch before margin between veins 4 and 6, with a dark spot or two above and below.

*Hindwing*: with similar lines, but the outer one plainly edged with ochreous and bent on vein 5, both stopping short at vein 2; a black-edged yellowish submarginal lunule on each side of vein 4; fringe rather darker; the fold whitish, the tuft of hair yellowish and glossy.

Underside paler, without any markings.

Face and palpi black; vertex and base of antennae cream-coloured; thorax and abdomen like wings; the tips of the lateral tufts pale.

Expanse of wings: 22 mm.

1 ♂.

Superficially the insect is not at all unlike *E. simplex* Warr. from India.

## FAMILY DREPANULIDAE.

6. *Oreta subvinosa* Warr.

Along with a ♂ example, agreeing exactly with the type lately described in Nov. Zool. x. p. 255, from Etna Bay, New Guinea, there has come another from the Upper Aroa River, differing in that the dark tints of both wings are all dull rufous brown, and the oblique line thin, inconspicuous, and curved, not straight and dark. On the underside and in all other points this example agrees with the type.

The two specimens, both ♂♂, were taken in March 1903.

7. *Tridrepana fulvata* Snell., ab. *fasciata* nov. and *olivacea* nov.

This species, described in the first instance from Java by Snellen, afterwards under the names *albonotata* Moore and *ochrea* Butler from India, and *lunulata* Butler from the Solomon Islands, is widely spread. In the British Museum there are examples from Hong Kong, and in the Tring Museum from Japan, Penang, Sumatra, Bali and New Guinea. In the last locality it appears to be subject to aberrational forms not met with, except in one solitary instance, elsewhere. The form I call *fasciata* consists merely in the area between first and second lines of the forewings being filled up with fulvous, generally without any alteration in the rest of the wing, though in one instance the deeper shade is diffused over the whole wing and the markings become thickened and blurred. Only in one example, from Gunong Ijau, has a similar development been noticed, as far as I know, out of New Guinea. The other form, *olivacea*, has not presented itself before. Out of 9 examples just received from the Upper Aroa River, 3 (2 ♂♂, 1 ♀) are of the typical form, 3 (2 ♂♂, 1 ♀) belong to ab. *fasciata*, the remaining 3, all ♂♂, are on the upperside dull olive-brown without a vestige of yellow, with the markings precisely as in the type, but the central fascia deeper, as in the ab. *fasciata*. Underneath the coloration is of the typical yellow, the only difference being that the cell-spot, the costal portion of the outer line, and the fringes are olive-brown;

the thorax, patagia, and abdomen are, like the wings, olive-fuscous; abdomen beneath and legs yellow, as in the type; in the brown upper half of face, the yellow vertex and antennae, and the white front of the shoulders, they agree with the type-form also.

All the examples were taken from February to April 1903.

### **Urogonodes gen. nov.**

*Forewing*: costa convex towards apex, which is bluntly produced and sub-falcate in the ♀, blunt and rectangular in the ♂; hindmargin bluntly elbowed at vein 3, faintly concave above and below.

*Hindwing*: apical and anal angles rounded; hindmargin straight to a blunt depressed tooth between veins 3 and 4, thence concave to anal angle; the inner margin not shortened.

Antennae with close clavate teeth in both sexes; palpi extremely short; tongue and frenulum absent; hindtibia with terminal spurs only.

Neuration: forewing, cell more than half the length of wing; discocellular strongly inangulate in middle, shortly vertical at lower end; first median nervule at one-half, second at three-fourths; lower radial from the lower outward angle of discocellular; vein 6 stalked with 7: 8 from upper end of cell, 10 and 11 long-stalked from close before it, 9 absent; hindwing, 7 long-stalked with 8, the stalk touching the subcostal at a point at middle of cell; discocellular vertical above, oblique below; first median nervule at two-thirds, second at eight-ninths, third stalked with the radial.

Type: *Urogonodes scintillans* Warr. (*Oreta?*).

### **S. *Urogonodes scintillans* Warr.**

*Oreta? scintillans* Warr., Nov. Zool. iii. p. 273 (♀) (1896) (Ferguson).

*Cyclura inconspicua* Warr., id. vi. p. 3 (♀) (1899) (St. Aignan).

The type of *scintillans* was in very poor condition. In referring *inconspicua* to *Cyclura* I remarked that the neuration did not agree: besides which, the inner margin of hindwing is not shortened nor the hindmargin excised, as I have been enabled to determine from the examination of specimens in good condition from the Upper Aroa River. The description given of *inconspicua* is good as far as it goes; but there is an outer diffuse dark line, starting from costa at two-thirds, oblique outwards to vein 7 near apex, then oblique inwards to two-thirds of inner margin. This and the median shade together form an ill-defined broad central fascia, continued across hindwing. The underside is better described as yellow ochreous. The ♂ is smaller and darker, with a purplish tinge; the two shades darker, marked by black costal spots nearer together, the outer shade, when visible, approaching the inner on submedian fold; the dark marginal markings are developed into a deep purple-brown blotch below middle, with some pale lilac-grey scales on it; there are also sometimes traces of an inner line nearer base; hindwings without distinct markings, either purplish or reddish.

Underside of forewing of ♂ bright red, the inner margin and a large costal blotch before apex yellow; the dark oblique line of the ♀ generally not so well developed; hindwings wholly bright red, flushed with yellow along costal and inner margins, and in one example tinged with dark; the line hardly shown.

Face and forelegs of ♂ bright red; thorax and abdomen sometimes dark fuscous; the shoulders always pale grey.

The discal spot of forewing is inconspicuous, especially in the ♂♂.

These New Guinea specimens expand 30 mm. in the ♀, and 22 mm. to 24 mm. in the ♂♂.

4 ♂♂, 1 ♀.

## FAMILY GEOMETRIDAE.

### SUBFAMILY ORTHOSTIXINAE.

#### 9. *Celerena hirtipes* spec. nov.

*Forewing*: pale yellow; the costa black to middle; the outer three-fifths of wing black, containing a large oblong yellow blotch from costa beyond middle towards anal angle, its sides generally parallel, but sometimes swollen below; the inner edge of the dark portion diffuse; the yellow triangular basal area nearly always more or less suffused with slaty grey, in the extreme cases with only the base of cell yellow.

*Hindwing*: yellow, with a broad black border from before apex to above anal angle.

Underside like upper; the basal area unsuffused, but always more restricted than above, the transverse black bar being broader.

Face, palpi, thorax and abdomen yellow; the tips of palpi blackish. Fore- and midlegs and hindtarsus dark; hindtibia with a large tuft of dark hairs at extremity.

Expanse of wings: 68 mm.

6 ♂♂, 6 ♀♀.

The furrow in forewing of ♂ lies in the cell, as in *vulgaris* Butler and *proxima* Meyr. In one ♀ example the slaty grey suffusion embraces not only the basal area of forewing but the marginal areas of both wings, as in *C. griseofusa* Warr., but in that species the shape of the yellow blotch is quite different. Both species have a dark tuft of hair at the end of the hindtibia.

#### 10. *Celerena nigriceps* spec. nov.

*Forewing*: deep yellow, the costa broadly black to middle, before which an oblique black bar runs to anal angle and joins the marginal black area; the yellow postmedian blotch bluntly pointed towards anal angle.

*Hindwing*: deep yellow, with a nearly uniformly broad black border from before apex to anal angle.

Underside the same, but the transverse black bar broader.

Face, palpi, vertex, and shoulders all black; patagia, thorax, and abdomen yellow. Fore- and midlegs and last four segments of hindtarsus dark; hindtibia and first segment of tarsus yellow; both slightly swollen, but without excrescences or tufts of hair.

Expanse of wings: ♂ 44 mm; ♀ 44—48 mm.

6 ♂♂ 3 ♀♀.

In this species the furrow in forewing of ♂ is short, and runs below the cell, not through it; both wings are shorter and broader by comparison, the hindwing especially; antennae of the ♂ simply ciliated.

11. *Celerena vulgaris* Butler.

Along with the above-mentioned examples of *C. hirtipes* and *nigriceps* came also 7 ♂♂ and 14 ♀♀ of another species, agreeing with *hirtipes* in the position and length of the furrow in the ♂ forewing, but without any tufts of hair on the hindtibiae, though these are armed with an apical projection, and the first joint of hindtarsi is swollen and triangular. In these the face remains yellow, while the vertex and shoulders are dark. The width of the transverse black band of forewing varies much. In four examples (3 ♀♀ 1 ♂) it is very broad, and the black suffusion extends along inner margin towards base. The ♂ agrees exactly with the description of *proxima* Meyr. The rest, in which the basal yellow area remains triangular and unsuffused, I refer to Butler's *vulgaris*, of which *proxima* Meyr. must be considered as an extreme aberration.

12. *Rambara strigicosta* spec. nov.

*Forewing*: white; the costa freckled and striated with grey; the lines formed of ochreous spots; first, basal, formed of three spots lying in a curve from one-fourth of costa to one-fifth of inner margin; the second, postmedian, from three-fourths of costa to middle of inner margin; the first five spots vertical to vein 4, except that the spot on the radial is displaced basewards, the last two vertical beneath the discocellular spot, the sixth obliquely half-way between the fifth and seventh; submarginal line continuous; a row of rather large round marginal spots; cell-spot large and black, irregularly triangular; fringe white.

*Hindwing*: with cell-spot ochreous, moderate; postmedian line strongly out-curved at middle; the rest as in forewings.

Underside white; the costa of forewings striated with grey, and the cell-spot blackish.

Head, thorax, and abdomen white; palpi externally dark fuscous; second segment of abdomen with black spots.

Expanse of wings: 25 mm.

1 ♂.

## SUBFAMILY DYSPHANIINAE.

*Microschema* nom. nov.

I propose to substitute the above name for the genus called by me *Dysschema* (Nov. Zool. v. p. 10), which name has been already used by Hübner.

Of the type species *goniata* 2 ♀♀ were received from the Upper Aroa River.

## SUBFAMILY PSEUDOTERPNIINAE.

13. *Actenochroma albifusaria*.

*Boarmia albifusaria* Wlk. xxxv. p. 1589 (♀) (1866).

*Pseudoterpnus albifusaria* Swinh. Cat. Lep. Het. O.M. ii. p. 385. t. 5. fig. 7 (1900).

The ♀ only has been hitherto recognised. In the fine collection made by A. S. Meek in the spring of 1903 on the Upper Aroa River, there are 4 ♂♂ and 1 ♀; the ♂♂ have simple antennae, and the species must be transferred to *Actenochroma*. A comparison of the sexes also shows that it is only in the ♀ that

the white subcostal blotches are developed—one at base of cell, the other beyond it; in the ♀♀ these remain green. In the hindwing the discal spot is followed in the ♀ by a square snow-white patch; this is green or whitish green only in the ♂♂. In both sexes a noticeable feature, visible in fresh examples, is a reddish patch on inner margin beyond the subterminal line.

#### 14. *Hypochroma modesta* spec. nov.

*Forewing*: deep green, speckled with blackish; the costal edge marked white in places and striated with blackish; the lines blackish, forming spots on costa; first quite close to base, obscurely marked; inner line at one-fourth, curved, slightly prominent above and below median vein, and well marked with black and some reddish scales following it on inner margin; outer line from nearly three-fourths of costa to middle of inner margin, concave outward to vein 6, then lunulate-dentate, and from vein 4 strongly incurved, marked like the inner line with black on inner margin and preceded there by reddish scales; cell-spot linear, oblique, very obscure; the inner line is preceded and the outer followed by a slight whitish or bluish-white tinge, which is developed into a patch towards hindmargin, between veins 3 and 4, and along submedian interval; a few reddish scales before outer line above vein 4; a row of black marginal lunules; fringe blackish with paler base, with a white fleck below vein 4.

*Hindwing*: similar; the cell-mark accompanied by a pale spot; submarginal line faintly paler.

Underside of forewing greenish grey, freckled with blackish, and tinged with olive towards hindmargin, which has a bluish-white patch below middle; base of cell yellow; costa yellowish; cell-spot black; hindwing in basal half like forewing, the outer half black, with a broad whitish fascia along its inner edge and a white patch on margin below vein 4.

Palpi and face dark brown, the face with a white bar at top and bottom; vertex green, brown in front; shoulders green, tipped with brown; thorax and abdomen green, the latter becoming greyish ochreous in anal half and paler beneath; dorsal crests very inconspicuous.

Expanse of wings: 39 mm.

1 ♀.

The hindmargin of forewing is slightly elbowed at vein 4. Hindwing with 6 and 7 separate; forewing with 11 free.

#### 15. *Hypochroma saturataria*.

*Hypochroma saturataria* Wlk., xxxv. p. 1593 (♂) (1866).

*Actenochroma? caesia* Warr., Nov. Zool. iii. p. 282 (♀) (1896).

*Hypochroma perfuscata* Warr., Nov. Zool. vi. p. 326 (♂) (1899).

*Pseudoterpna saturataria* Swinh., Cat. Lep. Het. O.M. ii. p. 384. t. 5. fig. 6 (1900).

The examination of a series of 9 ♂♂ and 9 ♀♀ of *saturataria* from the Upper Aroa River, British New Guinea, enables me to make this correction. Eight ♂♂, 6 ♀♀, are all typically marked on the uppersides, but the ♂♂ are all orange-yellow below, and the ♀♀ bluish slate-colour, in one example pale blue; the black marginal border is narrower and more broken in the ♀♀, the apex and marginal blotches bluish grey, instead of whitish ochreous. The remaining 3 ♀♀ have lost the bright green coloration of the upperside altogether, the slaty hue of the underside predominating and suffusing the whole surface of both wings, while

the black markings remain the same as in the type-form. In one example, the darkest of the three, the whole underside is a rich purple-blue. These three ♀♀ are identical with the ♀ described by me as *Actenochroma? caesia* from Fergussong Island, and of which I have also seen a ♀ from Ron Island. This must now stand as an aberration of *saturataria* Wlk. ♀. The redescription of the ♂ under the name of *perfulcata* was due to the erroneous idea that Walker's types of *saturataria* and *albifusaria*, both given from Mysol, referred to one and the same species. The ninth ♂ of the series received differs from the type-form on the upperside almost as much as the *caesia* form of the ♀, and I describe it as

ab. *perviridata* nov.

*Forewing*: pale green, slightly deeper green towards hindmargin; all the darker green mottlings and black lines and shades of the type-form wanting except the costal speckling; the inner and outer lines are marked only at inner margin with black and red scales, the outer also with dark green beyond the cell; submarginal line represented by a small patch of reddish scales on vein 5; hindwings with the outer line faintly marked in black and red, some black and red scales also on the upper half of discocellular and along subcostal vein towards base; the basal two-thirds of both wings and the veins throughout are conspicuously spotted and mottled with white. Head, thorax, and abdomen of the same pale green as the wings, the bar at base of face and across the middle of shoulders paler red than in the type. Underside like typical ♂♂ in all respects.

The example is slightly larger than those of the ordinary form.

16. *Hypochroma subrubella* spec. nov.

*Forewing*: moss-green, varied with brown and fuscous, and striated with blackish; central area darker, its inner edge at one-third, vertical, slightly indented below median, the outer from three-fourths of costa to two-thirds of inner margin, slightly bent at vein 6 and concave to 4, then dentate-lunulate and incurved, the teeth well marked on the veins; cell-spot blackish, followed by a paler patch; basal third green, traversed by a band of reddish brown and fuscous striae, broad and triangular at costa and fading out before inner margin; a narrow reddish and fuscous basal patch; submarginal line dentate, pale green, the teeth whitish, filled up with reddish and fuscous beyond a greenish band; marginal area paler at middle, the veins marked broadly with brown, the intervals with green; indistinct marginal blackish lunules; fringe greenish, darker beyond veins.

*Hindwing*: similar; the outer line acutely dentate; generally the brown tints predominate in the basal, the green in the marginal area.

Underside of both wings dull brick-red; costa of forewing yellowish, speckled with red; an angulated blackish median line on both wings; a submarginal row of pale spots on veins preceded by a darker tinge; fringe of both wings greenish ochreous, mottled with reddish in forewing, tipped only with reddish in the hindwing.

Face and palpi reddish above, ochreous below; vertex, thorax, and abdomen green varied with reddish; the base of shoulders and patagia and the basal segments of abdomen marked with reddish and fuscous scales; dorsal crests of abdomen metallic, prominent, curled; antennae reddish.

Expanse of wings : ♂, 35 mm. ; ♀, 40 mm.

3 ♂♂, 1 ♀ ; the ♀ wasted, the ♂♂ quite fresh.

Veins 6, 7 of hindwing separate ; in forewing vein 11 anastomoses with 12, 10 with 11, and again with 8, 9.

#### 17. *Pingasa acutangula* spec. nov.

*Forewing* : white, dusted with pale greenish or reddish scales ; costa with fine reddish-grey striations ; lines exceedingly slender, blackish with reddish scales in part ; first line from one-third of costa, preceded there by a small reddish-grey cloud, acutely angled inwards below subcostal vein, then running outwards beneath and parallel to subcostal to upper end of the discal mark, which is a long narrow oval edged with black and red scales, and with the central scales raised ; then back again parallel to its former course to below its first baseward angulation, acutely angled on the median, again running outwards and forming a double blunt angle on the submedian fold mixed with red scales, then oblique inwards to inner margin at one-fifth, marked there by bright red scales. Outer line at two-thirds of costa, forming three uniform outwardly wedge-shaped markings on veins 5, 6, 7, and three acutely angled teeth inwards in the intervals, the tooth above vein 4 sometimes prolonged linearly to touch the cell-mark ; from vein 4 to 2 running in the direction of the anal angle, thence oblique inwards, concave from 2 to 1, then straight to before middle of inner margin, marked there, like the inner line, with red scales ; marginal area beyond outer line straight to anal angle violet-grey, the submarginal line paler and zigzag ; a slightly paler, somewhat greenish blotch on margin below vein 4 ; marginal line festooned, black ; fringe violet-grey chequered with white.

*Hindwing* : with basal two-thirds white, dusted with greenish ; outer line forming a curve from costa to below vein 5, concave inwards, another to vein 2, marked with reddish teeth on the veins ; blackish lines between the veins denoting the teeth of the submarginal line ; marginal area paler than in forewing, broken up by patches of greenish white ; fringe white, marked with violet-grey beyond cell and on submedian fold.

Underside white, with very deep black marginal band in each wing, its inner edge running from two-thirds of costa to anal angle, leaving in forewing a square apical spot and an oblong marginal spot below middle white ; the spots in hindwing longer and narrower : a fine linear cell-mark on forewing.

Head, thorax, and abdomen whitish, dusted with reddish grey ; a fine double reddish line along dorsum on each side of the crests, the segments sometimes banded with reddish.

Expanse of wings : 48 mm.

2 ♂♂, 4 ♀♀.

A remarkable species, distinguished by its acutely angled lines.

#### 18. *Pingasa rufilunata* spec. nov.

*Forewing* : pal whitish green, in central area whitish dusted with pale green ; inner line dark green, shaped much as in *angulifera*, but nearer the base, the sharper angle on submedian fold marked with reddish scales ; outer line blackish green, distinctly dentate-lunulate throughout, oblique outwards to vein 6, vertical to vein 3, then oblique inwards, followed by four brown lunules below vein 3 and by a brown lunulate cloud from vein 5 to costa, the slightly paler submarginal line

forming the edge of the brown markings ; black marginal spots between the veins ; fringe pale greyish green ; cell-spot linear, blackish green, with traces of a small dot above it.

*Hindwing* : without first line ; some dark scales at base ; cell-spot green.

Underside whitish, with a greenish tinge ; a blackish marginal border to forewing, paling towards hindmargin and apex, but leaving no distinct spots, its inner edge sinuous ; cell-spot large, with a small dot above it ; hindwing with slight cell-spot, the black border narrower, its inner edge curved and subcrenulate, its outer more broadly pale.

Face deep black ; palpi pale greenish ochreous ; vertex, thorax, and abdomen green, the last with the basal segments dusted with blackish laterally, the anal segments and underside ochreous.

Expanse of wings : 40 mm.

1 ♀.

Akin to *P. angulifera* Warr., but smaller and more neatly marked ; the underside quite different.

#### SUBFAMILY GEOMETRINAE.

##### 19. *Agathia conjunctiva* spec. nov.

*Forewing* : deep green, without any yellow tint : the markings brownish liver-coloured ; all much broader and more ample than those of *A. pisina* Butl., which to a great extent they resemble ; the central fascia is more oblique, less constricted above and below the middle, and instead of ending vertically at middle of inner margin, curves obliquely outwards and coalesces below vein 1 with the dark outer area ; the inner edge of this area is oblique and indented once only, at vein 4 ; within its inner edge is a lustrous violet dentate line, well marked ; the subapical green blotch is bilobed and never reaches below vein 4 ; below it are two isolated yellow-green spots ; the marginal area becomes paler brown with dark slender strigae ; fringe red-brown.

*Hindwing* : with the marginal two-fifths dark, the inner edge merely bent, without any sinus, or at least with only a slight indentation at vein 4 ; the green submarginal oval blotch, the tooth and pale spot below it, as in *pisina* ; but the fringe red, darker beyond veins.

Underside like *pisina*, but the bands broader.

Shoulders, base of patagia, and a spot on metathorax green ; all the rest violet-brown ; face and palpi below ochreous.

Expanse of wings : 44 mm.

6 ♀♀.

This is nearest to the ♀ of *A. subcarnea* Warr., from which it is at once separable. Unfortunately, as in the case of *A. obnubilata*, no ♂♂ have been secured.

##### 20. *Agathia obnubilata* spec. nov.

*Forewing* : bright pale green ; the basal patch, a thick sinuous antemedian fascia, and the whole outer half of wing smoky olive-grey-green ; the costa grey-speckled ; the edge of basal patch curved ; the fascia bluntly rounded outwards above the median vein, and inwards below it, coalescing with the marginal dark area above the submedian vein ; this area inwardly projecting at vein 3 and more bluntly

below 6, with an outward sinns between; a pale green oblong subapical patch between veins 5 and 7, crossed by a row of pale green submarginal blotches of varying intensity, sometimes absent; fringe olive-grey.

*Hindwing*: with very small basal patch and no fascia; the pale green colour forming a square projection in cell into the dark outer area; a narrow elongated pale green blotch before margin from vein 7 to 5, and a small red-brown blotch on margin below vein 4, preceded by a pinkish ochreous dash; fringe olive-grey; a small pale green spot above anal angle between veins 1 and 2.

Underside cream-colour, faintly green-tinged in the forewing; the fascia very pale pinkish above median vein; a broad dull vinous submarginal fascia, pinkish inwardly, then crossed by a thick black zigzag cloud, and externally striated and blotched with blackish; small patches of reddish and black striae at apex and middle of hindmargin; hindwing with the broad internal pink-tinged area of the submarginal fascia very faint, the dark portion narrower; the tooth blackish grey, and the fringe darker than in forewings.

Abdomen beneath, legs, antennae, and palpi cream-colour; palpi above, upper part of face and fillet grey-green; vertex, shoulders, metathorax, and dorsal patches on the segments of abdomen bright green; patagia and rest of abdomen olive-green.

Expanse of wings: 44 mm.

5 ♀♀.

Allied in markings and coloration, but not in outline, to *A. diversiformis* Warr.

#### 21. *Anisogamia coerulea* spec. nov.

*Forewing*: bluish green, more thickly scaled than in *chionoplaea* Lower and its allies, the veins not darker nor marked with white dots; costa narrowly dotted with white and fuscous; lines white; first from one-sixth of costa to one-third of inner margin, minutely biangulated outwards in cell and on submedian fold; cell-spot dark green; outer line strongly zigzag at five-sixths, bisinuate inwards on submedian fold, at each side of vein 4 more broadly white; marginal white spots at end of veins, that at vein 4 enlarged into a blotch; fringe pale greenish.

*Hindwing*: the same, but without inner line.

Underside whitish; costal area of forewing greener, costal edge yellowish.

Face and palpi white below, olive-green above; fillet and antennae white; vertex, thorax, and abdomen of the same bluish green as the wings; dorsum with white spots, abdomen beneath and legs white.

Expanse of wings: 30 mm.

3 ♀♀.

#### 22. *Anisogamia rufipunctata* spec. nov.

*Forewing*: semidiaphanous, deep green; the veins finely deeper green, speckled with white; costa brown, dotted with white; the lines starting from deep yellow spots; the first, very fine and wavy from one-fourth of costa to one-third of inner margin; the outer from three-fourths of costa to three-fourths of inner margin, lunulate-dentate, vertical and distinct to vein 4, then oblique and obsolescent; marginal line crenulate, deep green, with large pink spots at the teeth; fringe pale green, pink beyond the spots; a slight reddish tinge in certain lights below end of cell between veins 2 and 3.

*Hindwing* : similar ; the apex with a shallow reddish smear from vein 8 to 6.

Underside pale iridescent green ; costa of forewing brown-speckled, with a spot at the origin of outer line.

Palpi white below, rather bright red above and externally ; face green, whitish below ; antennae red, white-dotted ; vertex, shoulders, patagia, and basal segments of abdomen deep green ; thorax and rest of abdomen pink with thick black speckling ; anal segment of abdomen and underside whitish ; laterally with a green stripe ; legs pinkish, forelegs red.

Expanse of wings : 35 mm.

2 ♀♀.

Allied to *metaspila* Wlk., *saturataria* Wlk., and *goniota* Lower.

In this species from the base of forewing beneath there depends a fan-like tuft of long green hairs. A similar tuft is present in several (probably all) of the allied species ; in *goniota* Lower, *chionoplaca* Lower, *lithocrossa* Meyr., and *subrenusta* Warr., the tuft is green ; in *fascinans* Lucas, *nigrimaculata* Warr., *insperata* Wlk., and *muscosa* Warr., white. The hairs composing the tuft probably soon get worn off, as they are always most conspicuous and perfect in the freshest specimens.

### 23. *Chlorochroma gigas* spec. nov. and ab. *minor* nov.

*Forewing* : pale green ; costa reddish grey, costal edge white, except at base ; two fine white lines ; the first obscure, from one-sixth of base to one-third of inner margin, bent on the median ; the second from two-thirds of costa straight to two-thirds of inner margin, very fine or obsolete above, thickening downwards ; cell-spot dark green ; fringe yellow beyond a fine red basal line, which is sometimes marked by red dots at the vein-ends.

*Hindwing* : similar ; the first line curved at submedian fold, the second bent at vein 3.

Underside whitish green, the outer line showing through ; costa of forewing reddish.

Face green ; palpi white below, sometimes tinged with reddish externally, the terminal segment reddish fuscous ; vertex and antennae white ; collar crimson ; thorax and abdomen deep green with a yellow dorsal line ; anal segment and underside white.

Expanse of wings : 44 mm.

9 ♂♂, 1 ♀.

The hindmargin of the hindwing is bluntly bent at vein 4.

The form which I call ab. *minor* differs first in its smaller size, 34—40 mm., and in the direction of the outer line of hindwing. This, instead of being bent at vein 3 and so running, as in the type-form, parallel throughout to the hindmargin, runs nearly straight across the wing, with a slight curve, if any, below the submedian fold.

Of this form there were 3 ♂♂ and 2 ♀♀ taken along with the type specimens.

### 24. *Chlorochroma indistincta* spec. nov.

*Forewing* : dull dark sage-green, with a slight bluish tinge in certain lights when fresh ; costa narrowly white ; fringe green ; cell-spot deeper green ; the two transverse lines very obscure, sometimes hardly distinguishable, and then marked only by the deeper tint accompanying them ; first curved from one-fourth of costa

to one-third of inner margin, second from two-thirds of costa to three-fourths of inner margin, lunulate-dentate, oblique outwards to vein 4, then somewhat sinuate inwards.

*Hindwing*: the same.

Underside white, in forewings slightly greenish beneath the white costa.

Palpi below white; above and externally green; face, vertex, thorax, and abdomen deep green; fillet and antennal shaft snow-white; the pectinations greenish; abdomen beneath and legs white; forelegs greenish.

Expanse of wings: ♂, 30—32 mm.; ♀, 33—36 mm.

2 ♂♂, 2 ♀♀.

#### 25. *Chlorochroma marginepunctata* spec. nov.

*Forewing*: pale green, somewhat transparent; costa broadly white; lines whitish, indistinct; first from costa near base to one-third of inner margin, out-curved above and below the median; outer from three-fourths of costa to two-thirds of inner margin, regularly lunulate-dentate, but only the teeth marked distinctly white on the veins; the inner line is followed, as the outer is preceded, by a slightly deeper shade of green; cell-spot rusty; fringe whitish-yellowish, with ferruginous spots at base between the veins.

*Hindwing*: without first line, the outer curved.

Underside whitish green.

Face and palpi green above; fillet and antennae snow-white; vertex, thorax, and abdomen green, the last with white dorsal spots; legs whitish, the forelegs tinged with greenish.

Expanse of wings: 38 mm.

2 ♀♀.

Hindwings elbowed at vein 4.

#### 26. *Chlorochroma minutipuncta* spec. nov.

*Forewing*: deep green, paling towards hindmargin; costa narrowly fuscons; two darker green transverse lines near together: the first waved, from one-fourth of costa to quite one-third of inner margin, oblique from costa; second from just beyond middle of costa to beyond middle of inner margin, vertical, lunulate-dentate; a black cell-speck of raised scales; fringe pale green, with minute dark specks at the base beyond veins, that at apex large.

*Hindwing*: similar; the outer line parallel to hindmargin, which is bent at vein 4; the spot at vein 4 larger.

Underside whitish green, greener in forewing; the hindmargin always paler.

Face and palpi green, the palpi ochreous below; fillet and antennal shaft snow-white, the pectinations rufous; vertex, thorax, and abdomen green, the last with white dorsal spots; anal segment and underside of abdomen, and the legs whitish; forelegs green-tinged.

Expanse of wings: 30 mm.

3 ♂♂, 1 ♀.

#### 27. *Chlorochroma polluta* spec. nov.

*Forewing*: bright apple-green; costal edge yellowish white, narrowly underlined with pinkish grey; the lines whitish, fairly distinct, obscurely lunulate-dentate; first from one-fourth of costa to one-third of inner margin, curved; the second from

two-thirds of costa to two-thirds of inner margin, outcurved above median vein ; cell-spot black accompanied by some fuscous scaling, which is sometimes confined to the discocellular and at others is diffused in parts over nearly the whole of the space between the lines and along their course ; marginal red spots beyond the veins ; fringe deep yellow.

*Hindwing* : with the outer line strongly curved in the middle and bent in to three-fifths of inner margin ; cell-spot black, without any fuscous scaling ; fringe deep yellow, sometimes reddish-tinged.

Underside whitish green ; forewing dark green in costal half ; the costa coloured as above.

Face green ; palpi white below, the terminal segment fuscous ; vertex and antennae white ; collar crimson, yellow behind the eyes ; thorax and abdomen green, with a yellow dorsal line ; anal tuft and underside white.

Expanse of wings : 30 mm.

2 ♂♂, 2 ♀♀.

The hindwing bluntly elbowed at vein 4.

### 28. *Chlorochroma punctulata* spec. nov.

*Forewing* : blue-green ; costal edge ochreous ; the lines slightly paler ; first, waved, oblique, from near base of costa to one-third of inner margin ; the outer lunulate-dentate, from two-thirds of costa to two-thirds of inner margin, slightly projecting on veins 3 and 4 ; space between the lines a little darker ; purple marginal dots at ends of veins ; fringe yellow ; cell-spot minute, dark green.

*Hindwing* : like forewings.

Underside very pale green, deeper on forewing below the yellow costal streak ; marginal dark dots conspicuous.

Palpi red above, whitish below ; face red ; fillet and shaft of antennae snow-white, the pectinations green ; vertex, thorax, and abdomen blue-green ; anal segment and underside of abdomen whitish ; legs whitish, forelegs reddish fuscous.

Expanse of wings : ♂, 34 mm. ; ♀, 40 mm.

6 ♂♂, 4 ♀♀.

### *Endemia* gen. nov.

*Forewing* : with costa straight ; apex bluntly rounded ; hindmargin slightly curved.

*Hindwing* : with apex rounded ; anal angle rectangular ; hindmargin faintly bent at middle.

Antennae of ♂ with straight even pectinations to three-fourths, these ciliated ; of ♀ annulate, pubescent. Palpi upturned in front of face, short, terminal segment short, pointed ; tongue and frenulum present, the latter very fine ; hindtibia thick, with four spurs and a projection at end ; tarsi quite short.

Neuration : forewing, cell less than half the length of wing ; discocellular concave ; first median nervule at two-thirds, second and third from the lower end of cell ; lower radial from upper two-thirds of discocellular, upper from top end of cell ; 10, 7, 8, 9 stalked from the end, 11 just before them, anastomosing with 12, 10 with 11 ; hindwing with 3, 4 and 6, 7 stalked.

Type : *Endemia tenera* spec. nov.

29. *Endemia tenera* spec. nov.

*Forewing*: smooth grass-green, slightly diaphanous; costa reddish fuscous; lines neatly marked, darker green; first from costa close to base to one-third of inner margin, outcurved above and below median; outer, lunulate-dentate from two-thirds of costa to three-fifths of inner margin, projecting at veins 3 and 4; discocellular darker green, with a point in its lower half of raised black scales; fringe green, darker along base.

*Hindwing*: the same, but without first line.

Underside silky white; upper half of cell of forewing and the parts beyond greenish.

Face and palpi dull red above, white below; antennae red, the apical fourth white; vertex, thorax, and abdomen green, the last with white dorsal spots; anal segment, underside, and legs whitish; forelegs tinged with green.

Expanse of wings: 26 mm.

1 ♂, 3 ♀♀.

30. *Hemistola? punctifimbria* spec. nov.

*Forewing*: dark bluish green; costa dark brown with fine ochreous dots; the lines whitish, the first generally interrupted and obscure above the median, outcurved on both sides and with the teeth marked whiter on the veins; outer line from below three-fourths of costa to two-thirds of inner margin, the teeth forming broad wedge-shaped marks on the veins, interrupted between; the central area deeper green, especially along the lines; cell-spot dark green; fringe green, with paler outer half, sometimes obscurely chequered with darker.

*Hindwing*: without first line; the fringe distinctly chequered with brown, the spot at vein 4 prominent.

Underside bluish white, glossy; the forewing mainly suffused with deeper green; the costa as above; fringes of both wings olive-green with distinct brown chequering.

Palpi, face, and vertex deep green; thorax and abdomen bluer green; the latter with white segmental rings sometimes forming dorsal spots; the metathorax with a large white spot; towards the anus and beneath the abdomen is white; pectus and femora green; tibiae and tarsi dark fuscous with ochreous rings.

Expanse of wings: 42–46 mm.

4 ♀♀.

Placed in *Hemistola* provisionally in the absence of the ♂.

31. *Iodis costipicta* spec. nov.

*Forewing*: bluish green, speckled with dark green; the costa orange striped with green; markings green; an undefined cloud near base, and a curved diffuse band from below two-thirds of costa to beyond middle of inner margin, touching on the inner side a green cell-mark; hindmargin darker green; fringe green.

*Hindwing*: like forewings.

Underside pale bluish green with the fringes deep green; costal half of forewing yellowish green; costa itself yellow.

Face and palpi above olive-green; fillet and shaft of antennae white, the pectinations olive-green; vertex, thorax, and abdomen green; abdomen beneath and legs white; the fore- and middle-legs green-tinged.

Expanse of wings : 22 mm.

1 ♂.

Near *I. centrophylla* Meyr. from Anstralia and *viridaurea* Warr. from Ron Island.

### 32. *Iodis fragilis* spec. nov.

*Forewing* : delicate pale green, with a bluish gloss, caused by a sprinkling of fine whitish scales ; costa from near base pinkish grey, in one case pinkish ochreous ; the lines whitish, dentate-lunulate ; the first from near base to one-third of inner margin, the outer from two-thirds of costa to nearly three-fourths of inner margin, the first followed and the outer preceded by deeper green ; cell-spot green. In some cases both lines are very faint and indicated mainly by the dark green shades ; in others quite distinct and the outer marked by white points on veins, while the cell-spot is followed by a white spot ; fringe green.

*Hindwing* : like forewing, similarly varying.

Underside whitish green ; the costal half of forewing delicate pale green ; the costal edge as above.

Face and palpi green above, white below ; fillet and shaft of antennae white ; the pectinations olive-green or yellowish ; vertex, thorax, and abdomen green ; segmental rings white ; anal tuft and underside of abdomen white ; legs white, the forelegs greenish-tinged.

Expanse of wings : 24 mm.

9 ♂♂, 2 ♀♀.

### 33. *Loxochila? meeki* spec. nov.

*Forewing* : dark green, thinly scaled ; costa ochreous spotted with purple ; the lines white, very strongly waved ; first, more or less interrupted, from one-fifth of costa to one-fourth of inner margin, bent outwards above and more strongly below the median, marked with white on the veins and at the ends of the projections ; outer line from five-sixths of costa to two-thirds of inner margin, marked by three white spots placed obliquely on veins 7, 6, and 5, and below 5 lunulate-dentate, the outer teeth and the lunule on submedian fold more broadly white, an acute white tooth running inwards along vein 1 ; cell-spot dark green ; marginal line finely white ; fringe purple at base, with whitish tips and chequered with white between the veins.

*Hindwing* : similar, without first line.

Underside whitish green, the lines showing through ; fringes and costa of forewing as above.

Face and palpi wholly dark green ; fillet and antennae white ; vertex, thorax, and abdomen green ; metathorax with white crest ; dorsum with white spots ; pectus and sides of abdomen green ; femora green ; tibiae and tarsi purple-brown spotted with ochreous.

Expanse of wings : 60 mm.

1 ♀.

### *Pauresthes* gen. nov.

Among the *Geometrinae* from New Guinea lately received from A. S. Meek there are a few which cannot be satisfactorily referred to any existing genus, and which, as not apparently occurring in the neighbouring islands, are probably

endemic developments. The four species before me, while all characterised by enlargement and coloration of the discal stigma, are separable into two quite distinct groups. That for which I propose the name *Pauresthes* seems most nearly related to *Anisogamia metaspila* and its allies. As in those species, the margins of both wings are crenulate and the wings themselves semitransparent, though not to the same extent. In *P. caniola*, which I make the type, the cells are shorter than half the wing and vein 6 of forewing is stalked with 7; in the other the cells are longer.

#### 34. *Pauresthes caniola* spec. nov.

*Forewing*: dark green, thinly scaled, dusted with very fine bluish white scales; costal edge yellow throughout; the two transverse lines dentate-lunulate, only marked by the shade of deeper green following the first and preceding the second; the first from costa near base to one-third of inner margin, obliquely curved, and slightly indented on submedian fold; outer line from three-fourths of costa to two-thirds of inner margin, strongly dentate, and as deeply insinuate between the teeth, especially on submedian fold, the teeth on veins 3 and 4 equally produced and forming a squarish projection; fringe green; cell-spot black, set in a disc of hoary rufous grey scales, somewhat diffusely edged with a ring of olive-green and blackish scales.

*Hindwing*: without first line; the black cell-spot large and placed in a pyriform disc of reddish-brown scales speckled with black.

Underside whitish green, the markings only showing through; costa of forewing yellow; fringes dark green.

Palpi white below, greenish-tinged externally, the terminal segment greenish fuscous, sometimes reddish-tinged; face yellow-green above, whitish below; fillet and base of antennae white; rest of antennae reddish; vertex blue-green; collar whitish; thorax and abdomen dark green, the latter with white dorsal spots; abdomen beneath and legs whitish; forelegs in front and internally reddish.

Expanse of wings: 40 mm.

2 ♀♀.

Cell less than half of wing; vein 6 of forewing stalked with 7; veins 6, 7 and 3, 4 of hindwing stalked.

#### 35. *Pauresthes signifera* spec. nov.

*Forewing*: sea-green, semidiaphanous; the space between the two transverse lines deeper green; costal edge fuscous; the lines faintly whitish; first from one-sixth of costa to one-third of inner margin, outcurved above and below median vein; second from three-fourths of costa to two-thirds of inner margin, dentate-lunulate, outcurved from costa to submedian fold, the teeth whiter on the veins; fringe green; cell-spot irregularly lunate, brownish ochreous speckled with black scales, the whole surrounded with white scales.

*Hindwing*: similar, but the cell-mark much larger, ear-shaped and constricted in the middle; the outer line bent parallel to hindmargin.

Underside whitish green, the spots showing through.

Face and palpi green above, white below; fillet and antennae white; vertex, thorax, and abdomen dark green. Abdomen beneath and legs white.

Expanse of wings: 29 mm.

1 ♀.

In forewing vein 6 from upper angle of cell, which is half the length of wing ; cell of hindwing more than half as long as wing ; 6, 7 short-stalked.

**Poecilostigma** gen. nov.

*Forewing* : elongate ; costa straight, curved only at base and before apex ; hindmargin curved, not crenulate.

*Hindwing* : with anal angle well marked, apical angle rounded ; hindmargin slightly elbowed at vein 4, sinuous above.

Frenulum present, but obscure. Structure and venation as in *Chlorochroma*. Coloration whitish green, with rust-coloured markings.

Type : *Poecilostigma vagabunda* spec. nov.

36. **Poecilostigma periculosa** spec. nov.

*Forewing* : whitish green, the dark green scaling on a bluish-white ground ; costa grey-brown speckled with dark fuscous ; the lines darker green, mixed with rufous and brown scales ; first from one-fourth of costa to one-third of inner margin, outcurved above and below median vein, the teeth marked with brown on the veins ; outer line from two-thirds of costa to just beyond middle of inner margin, lunulate-dentate, strongly outcurved in midwing, the teeth brown and acute ; a row of black marginal spots at the vein-ends ; fringe yellow. Cell-spot a large blotch of irregular shape, jasper-red edged with black, containing a patch of hoary-grey scales in middle and at top, angled outwards on vein 5.

*Hindwing* : like forewing ; the cell-mark smaller, triangular, with acute teeth and whitish centre ; the marginal spot at vein 4 large.

Underside bluish white, the cell-marks showing through ; marginal spots black-red.

Palpi beneath, lower half of face, vertex and base of antennae snow-white ; palpi above, upper half of face, tips of antennae, back of crown, and the collar deep red-brown ; thorax and abdomen green, the latter with a rust-red dorsal stripe forking on metathorax.

Underside of abdomen and legs white ; forelegs fuscous reddish.

Expanse of wings : 36 mm.

1 ♀.

In hindwings 6, 7 from end of cell ; 3, 4 short-stalked.

37. **Poecilostigma vagabunda** spec. nov.

*Forewing* : whitish green ; costa brown, broadest at middle ; a dark spot near base of median vein ; lines dull rust-colour ; first from costa close to base to one-fourth of inner margin, strongly outcurved on each side of the median vein ; outer line from three-fourths of costa, oblique outwards to vein 6, vertical to vein 5, then incurved and oblique to two-thirds of inner margin, dentate outwards on veins ; the inner margin with a rust-coloured streak ; the angulated discocellular marked in rust-colour ; marginal spots rust-colour ; fringe pale green.

*Hindwing* : similar ; the inner line simply curved, and the discal mark dark green ; marginal spots at veins 1, 4, and 6 larger.

Underside bluish white without markings ; the spots at ends of veins 4 and 6 of hindwing alone marked.

Face and palpi whitish below, dark brown above; vertex, thorax, and abdomen blue green; metathorax with a large brown blotch; middle segments of abdomen with two pairs of brown spots; antennae of ♂ with the shaft greenish, the pectinations brown; of ♀ green at base, then reddish; legs white; forelegs with femora reddish, tibiae olive-green, in the ♂ with a reddish pencil of hairs beneath.

Expanse of wings: ♂, 38 mm.; ♀, 40 mm.

1 ♂, 1 ♀.

Veins 6, 7, and 3, 4 of hindwing stalked.

### *Pyrrhaspis* gen. nov.

*Forewing*: triangular, costa straight; hindmargin faintly curved, nearly vertical.

*Hindwing*: with inner margin prolonged, hindmargin curved, anal angle prominent.

Antennae of ♂ bipectinate, apical half or third simple; of ♀ simple; palpi obliquely porrect upwards; third segment longer in ♀ than ♂; tongue and frenulum present; hindtibiae of ♂ with four spurs and a process.

Neuration: as in *Thalassodes* Guen.

Type: *Pyrrhaspis coerulea* spec. nov.

### 38. *Pyrrhaspis coerulea* spec. nov.

*Forewing*: pale blue-green; costa ochreous yellow; lines marked by white spots on the veins; first close to base, with spots on median and submedian only; outer from four-fifths of costa to three-fifths of inner margin, sinuous, the spot on vein 4 being displaced outwards; fringe blue-green; cell-spot slightly darker.

*Hindwing*: without inner line of spots.

Underside uniform bluish white; fringe unspotted.

Face and palpi red-brown above, snow-white in lower half; the brown and white of the face divided by a green line; fillet and antennal shaft white; pectinations bronzy yellow; vertex, thorax, and abdomen blue-green; dorsum with silvery white spots, that on second segment large, the upper half pink; legs ochreous white; forelegs fuscous-tinged.

Expanse of wings: 40 mm.

1 ♂.

The ♂ antennae have only the apical third simple.

### 39. *Pyrrhaspis punctifimbria* spec. nov.

*Forewing*: apple-green, with the costa and lines almost the same as in *coerulea*, both lines with the white spot on vein 1 continued as a blotch to inner margin; the spots of the outer line less strongly sinuous, that on vein 4 being scarcely displaced; fringe spotted with dark at the vein-ends below apex, sometimes almost obsolete.

*Hindwing*: like forewings, without basal line, the marginal spots more distinct.

Underside whitish green; the fringe of both wings strongly chequered with purplish beyond the dark marginal spots.

Palpi red above, white below; face bright green with a red bar at top; fillet

and antennal shaft white ; pectinations rufous ; vertex, thorax, and abdomen green ; dorsal spots as in *coerulea*.

Expanse of wings : 37 mm.

2 ♂♂, 1 ♀.

The ♂ antennae have the apical *half* simple.

#### 40. *Pyrrhorachis viridula* spec. nov.

*Forewing* : delicate green ; costa reddish, black-speckled, the inner edge yellow ; hindmargin with a row of contiguous black-speckled purple-red lunules, preceded by a yellow line with silvery white specks between the lunules, and followed by an orange marginal line, with specks of black scales at the vein-ends ; fringe orange and black.

*Hindwing* : with similar marginal border, the silvery spots between lunules larger.

Underside paler, with the fringes and costa of forewing reddish.

Face and palpi bright red above, pale below ; vertex bright red ; fillet and antennae white ; shoulders and patagia green ; thorax and abdomen deep red with black speckles ; a pale line on first two dorsal segments ; abdomen at sides and beneath ochreous ; forelegs reddish.

Expanse of wings : 16 mm.

1 ♂.

Distinguished from *P. deliciosa* Warr., which it otherwise closely resembles, by the green, not blue, ground-colour.

#### 41. *Rhomborista inquinata* spec. nov.

*Forewing* : apple-green, rather thinly scaled ; costa with fine short dark brown striae on an ochreous ground ; lines dark purplish brown, more or less interrupted and indistinct ; first from one-fourth of costa to one-third of inner margin, lunulate-dentate, forming deep lunules outwards, two above and two below the median vein, the teeth running far in towards base and marked with a brown and white dash on the three veins, the line really being double with a pale ochreous centre ; cell-spot dark brown, often with another brown spot above it ; outer line at three-fourths, also double, the lunules pointing inwards and the teeth, marked light and dark, much nearer margin, forming a submarginal row of dashes, the top three beneath costa often becoming large spots ; towards costa and between the two lines a lot of brown transverse striae ; a row of marginal brown spots at end of veins ; fringe green with reddish mottlings.

*Hindwing* : with the inner line single, the outer shown only by the submarginal line of points, the lunules being dark green and obscure, and marked by a dark spot on inner margin and a reddish one below vein 5 ; marginal dots as in forewings, that at vein 4 large ; an oblong dark blotch at anal angle ; extreme base of wing white.

Underside pearly whitish green ; costal region of forewing tinged with pale green, the costal edge white with brown flecks.

Palpi whitish, tinged above with red-brown ; face green, brown above, sometimes wholly brown ; vertex, thorax, and abdomen green, the last with white dorsal spots ; a spot on basal segment and another on metathorax brown ; antennae

speckled fuscous and ochreous ; abdomen beneath and legs cream-colour ; forelegs in front fuscous with pale rings.

Expanse of wings : 39 mm.

3 ♂♂, 4 ♀♀.

#### 42. *Tanaorhius unipuncta* Warr.

The ♀ of this New Guinea species is a most beautiful insect. Instead of dark green, the wings are deep chocolate, with the central fascia of forewing white thickly dusted with chocolate atoms, the only green parts being a tinge at base, along inner margin at the bottom of the central fascia, and along the hindmargin ; the edge of the basal patch and the submarginal line are whitish, tinged with green. In the hindwing the central and submarginal lines are also whitish. Underneath, the forewing resembles that of the ♂, but the red tints are deeper, less vivid ; the hindwing is wholly different, being almost the same as the forewing, instead of bright yellow and red as in the ♂. Face and front of thorax green ; rest of thorax and abdomen deep chocolate, each segment behind with white dorsal points ; palpi dark chocolate with the tips black.

Expanse of wings : ♀, 78 mm.

2 ♀♀, accompanied by two typical ♂♂.

#### 43. *Thalassodes dorsilinea* spec. nov.

*Forewing* : pale green, semitransparent, with slight whitish vermiculations ; costa deep yellow ; fringe bright yellow ; two whitish transverse lines ; first near base oblique outwards and straight, often obscure ; the second from just beyond middle of costa to three-fifths of inner margin, also straight.

*Hindwing* : with outer line only, nearly straight to vein 4, then bent and waved ; fringe yellow.

Underside pale yellowish green, the white lines showing through.

Face and palpi green above, ochreous below ; fillet white ; vertex, thorax, and abdomen green, the last with a fine white dorsal line ; underside of abdomen and legs yellowish ochreous ; fore- and midtibiae and tarsi reddish-tinged.

Expanse of wings : 30—34 mm.

2 ♂♂, 3 ♀♀.

Distinguished by the pale line of dorsum, as in many *Chlorochroma*.

*T. chloropis* Meyr. is described as having one also ; but in that species the face is ochreous and the insect is larger.

#### 44. *Thalassodes dorsipunctata* spec. nov. and ab. *minor* nov.

*Forewing* : sea-green, semitransparent ; thickly covered with short white rippings ; costa finely ochreous yellow ; an obscurely marked oblique white line near base ; outer line from beyond middle of costa to three-fifths of inner margin, straight, but distinctly lunulate-dentate, the teeth marked whiter on the veins ; fringe grey-green, with the tips paler, and minute dark dots at base at the vein-ends.

*Hindwing* : similar, the marginal dots more prominent ; the outer line distinctly dentate, and parallel to hindmargin throughout.

Underside whitish green.

Face and palpi brown above, ochreous below ; fillet and antennal shaft white ; vertex, thorax, and abdomen green, the last with a row of white dorsal spots.

Expanse of wings : ♂, 44 mm. ; ♀, 48 mm.

1 ♂, 3 ♀ ♀.

Together with these came 6 ♂♂, dated January and February, all in better condition than the others, agreeing with the type-form in the white spots of the dorsum and in all other points, but only 40 mm. in expanse, and without the dark marginal spots at the base of the fringe. For the present I consider them as an aberration merely, which I name ab. *minor*.

45. *Thalassodes nivestrotta* spec. nov.

*Forewing* : dark green, crossed by numerous outwardly oblique white striae, which in places coalesce and form oblique white bands, which are themselves traversed by green strigae ; these bands are four in number, one near base, the second before the middle, the third postmedian, forking towards anal angle, and a fourth, smaller, towards apex ; costa mainly white, with green striae ; a dark green marginal line ; fringe green and white.

*Hindwing* : with two white bands, one from base to outer margin above anal angle, the other towards apex.

Underside white, with the green of the upperside showing through.

Face and palpi green above, white beneath, the terminal segment of palpi dark ; vertex and collar white ; shoulders and patagia green, edged with white ; thorax and abdomen green, with a central white stripe ; anal segment, sides, and underneath white ; pectinations of the ♂ antennae rufous.

Expanse of wings : 50 mm.

1 ♂, 3 ♀ ♀.

46. *Thalassodes umbrimedia* spec. nov.

*Forewing* : dark sea-green, semitransparent ; covered with short bluish green vermiculations, which, being fewer in the central area, give it the appearance of a darker fascia ; the lines marked only by this difference of tint ; the first outwardly oblique and slightly curved from costa close to base to one-fourth of inner margin ; the outer denticulate from two-thirds of costa to three-fifths of inner margin, projecting slightly at vein 6 and below middle ; fringe green ; costa narrowly yellow ochreous.

*Hindwing* : similar, but the dark green area less defined and visible only before outer line, which is bent below middle, as usual in the genus, and retracted to two-thirds of inner margin ; a darker green shade on the discocellular.

Underside whitish green ; costa of forewing yellowish.

Face and palpi green above, ochreous below ; fillet and antennal shaft white ; the pectinations of the ♂ antennae and the apical half of the ♀ shaft yellowish ; vertex, thorax, and abdomen green ; abdomen beneath and legs ochreous ; fore- and midtibiae and tarsi reddish.

Expanse of wings : 36 mm.

1 ♂, 1 ♀.

SUBFAMILY STERRHINAE.

47. *Chrysocraspeda lilacina* spec. nov.

*Forewing* : yellow, speckled and striated with bright red ; costal area, the space between veins 3 and 4, and a blotch at anal angle lilac ; a dull purple-red blotch at base below subcostal vein, followed by a small space of pure yellow below

a slightly curved reddish mark from costa; cell-spot obscure, red, followed by a small yellow spot; a curved deep-red band at two-thirds from subcostal vein to vein 4 and between 2 and 3; the lilac space between 3 and 4 edged above with reddish scales running out into the yellow fringe.

*Hindwing*: with two or three red spots at base; cell-spot large, yellowish white; a faintly deeper red postmedian line parallel to hindmargin; a blotch at anal angle, the space between veins 3 and 4 and a smaller blotch towards apex lilac; fringe pale yellow, beyond a reddish marginal shade, interrupted by red at the middle angle.

Underside pale yellow; all the lilac patches and the costa and cell of forewing rosy.

Face, palpi, and forelegs bright red; vertex, patagia, and antennae dark purple-red; thorax and abdomen yellow, speckled with blood-red.

Expanse of wings: 22 mm.

1 ♀.

Both wings bluntly angled in middle of hindmargin.

#### 48. *Chrysocraspeda rothschildi* spec. nov.

*Forewing*: yellow, shaded with pale brownish striae; costal region grey-brown; a few red and brown scales mark the cell-spot; a dark mark below costa at three-fourths and a black spot surrounded with crimson between veins 3 and 4 indicate an outer line; base of wing black followed by a crimson stain; a small black spot on inner margin at one-third, also surrounded with crimson; this seems to indicate the end of a basal line, as a slight dark mark on costa at one-fifth suggests its beginning; a row of small dark dots on margin at end of veins; fringe pure yellow.

*Hindwing*: with the outer half and fringe as in forewing; the inner half from one-third of costa to two-thirds of inner margin intense black, edged by a broad curved crimson band and containing near base a triangular spot of pure white also edged with crimson; cell-spot minute, oval, white, lying in the black basal area.

Underside whitish yellow, the fringe deeper; costal area of forewing and the spot below vein 4 rosy; base of hindwing dull vinous with a white patch.

Palpi red; face yellow; vertex dark grey; antennae, thorax, and abdomen dark red-brown; anal segment of abdomen, the underside, and legs dull yellow; forelegs reddish.

Expanse of wings: 22 mm.

1 ♂.

The collocation of colours is remarkable. Both wings with rounded hindmargin, that of hindwing slightly protuberant at middle.

#### 49. *Chrysolene aurora* spec. nov.

*Forewing*: bright rosy, with a dull olive-yellow band from costa just before apex to two-thirds of inner margin; fringe rosy.

*Hindwing*: with the band central.

Underside rather duller; the inner margins whitish.

Face and palpi deep red; vertex and antennae snow-white; thorax and basal half of abdomen like wings; the anal segments above, the underside, and the sides pale ochreous; forelegs reddish.

Expanse of wings : 33 mm.

1 ♀.

In the absence of the ♂ I leave this species in *Chrysolene*, with which it agrees in neuration ; but the palpi are longer than in that genus, the scaling much smoother, and the shape of the wings different. Superficially it might easily be taken for an Ennomid.

#### **Eremocentra** gen. nov.

I find on examination of two good ♂♂ of the species I called *Brachycola flavareata* from Penang (Nov. Zool. iv. p. 215) that its reference to *Brachycola* is erroneous, the structure of the hindlegs being quite different from that and all others of the allied genera. The femora are not shortened, but slightly larger than the tibiae, and the first segment of the tarsus is as long as the tibia itself ; the tibia has no spurs properly so called, but from the end a long slightly curved projection, rough-sealed beneath. In the better preserved specimen, from Sudest Island, the hindfemora and -tibiae are clothed with rosy hairs ; the second, lately received from A. S. Meek, comes from the Upper Aroa River, British New Guinea, so that the species appears widely distributed. I propose the above generic name for its reception.

#### 50. *Mesotrophe?* *rufiplaga* spec. nov.

*Forewing* : dull straw-colour, with very slight dark dusting ; a curved line near base, marked by dark dots on the veins ; an outer line at three-fourths, similarly marked ; a thin dentate-lunulate grey median shade at two-thirds ; cell-spot round, brown ; fringe straw-colour, with black dots at base between the veins ; beyond the outer line a large pale brick-red blotch on inner margin touching vein 3, and a smaller one beyond the cell, both traversed by the pale submarginal line.

*Hindwing* : the same ; but the cell-spot with a white centre.

Underside speckled with dark ; cell-spots in both wings, and in forewing traces of the median shade, outer line, and blotch beyond cell.

Face and palpi pale below, red-brown above ; thorax and abdomen like wings ; vertex paler.

Expanse of wings : 44 mm.

1 ♀.

Probably a *Mesotrophe* ; the ♂ must be waited for.

#### 51. *Perixera?* *glomerata* spec. nov. and ab. *condensata* nov.

*Forewing* : pntty-coloured, very thickly irrorated with greyish purple atoms, the narrow space immediately beyond outer line alone without speckles ; inner line close to base and outer line at five-sixths marked by dark vein-dots ; the inner also marked by a very faint grey cloud, forming a rounded projection above and below median vein ; the outer with the dots connected by a slight lunulate grey shade ; a faint sinuous grey median band ; cell-spot linear, blackish ; marginal dots black ; fringe pale ochreous.

*Hindwing* : with cell-spot thicker, the line joining dots of outer line and the dots themselves more conspicuous ; slight dots at the vein-ends as well as between them.

Underside pale ochreous ; forewing thickly washed and speckled with dull rosy, hindwing along costa only ; outer and submarginal lines marked towards costa.

Face and palpi deep red above, ochreous below ; vertex and antennae cream-colour ; thorax and abdomen like wings, the latter with slight dark dorsal spots.

Expanse of wings : 30 mm.

1 ♀.

ab. *condensata* nov.

*Forewing* : ochreous, coarsely and irregularly dusted with reddish ; lines very obscure, marked by reddish vein-dots ; first near base, outer strongly curved at five-sixths ; marginal spots red, distinct ; cell-spot linear, blackish, touching a broad sinuous diffuse fascia of dull vinous red atoms.

*Hindwing* : similar ; the cell-spot lying in the fascia, which projects on veins 3 and 4.

Underside pale straw-colour, with the fascia and outer line marked.

Face and palpi pale beneath, reddish above ; vertex and antennae whitish ; thorax and abdomen like wings ; forelegs reddish in front.

Expanse of wings : 30 mm.

1 ♀.

Somewhat like *Brachycola mediusta* superficially.

This example is somewhat wasted, and in consequence the grey dusting of the type is worn off ; but it is evidently an aberration merely.

52. *Perixera* ? *plumbeodisca* spec. nov.

*Forewing* : dingy yellowish ochreous, speckled with purple and reddish atoms ; two or three dark dots close to base ; first line fuscous from costa close to base to one-fourth of inner margin, excurved in middle of wing and marked by dark dots on the veins, touching above the median a brownish spot in cell ; cell-spot large and round, plumbeous, with a dark central line and edged with purple, lying in the sinus of the fuscous median shade, which curves in beneath it to the origin of vein 1, then runs oblique outwards and straight to middle of inner margin ; outer line fine at three-fourths, starting from a fuscous cloudy costal blotch, excurved in middle and marked by blackish dots on veins, dentate-lunulate below vein 4, followed by a grey cloud beyond cell and above inner margin ; submarginal line wavy, indistinct ; purple-red marginal spots between veins and dots beyond them ; fringe ochreous.

*Hindwing* : with the discal spot large and oval ; outer line more dentate, followed by a grey blotch beyond cell.

Underside yellowish straw-colour with the markings rosy and purplish.

Palpi very long, red above ; face white, red above ; thorax and abdomen like wings ; vertex paler ; fore- and midlegs glossy reddish.

Expanse of wings : 30 mm.

2 ♀ ♀.

53. *Perixera* *subalbescens* spec. nov.

*Forewing* : whitish stone-colour, thickly and minutely grey-speckled ; markings very indistinct ; first and outer line marked only by blackish dots on veins ; the first near base, marked by three dots in a line ; a fourth in cell before the small blackish cell-dot ; outer line at five-sixths, the dot on vein 5 displaced basewards, the ground on each side of it purer, not speckled ; marginal spots and dots black ; fringe whitish ; faint traces of a grey median shade beyond the middle.

*Hindwing* : towards base and costa whiter ; three dark dots on submedian and

median veins and the cell-fold indicate an inner line ; cell-spot distinct, black with a small pale centre ; the rest as in forewings.

Underside of hindwing and inner margin of forewing white, rest of forewing suffused and speckled with grey, the costa at base broadly dark grey ; both wings with cell-spots, outer, and marginal lines of spots.

Face and palpi with lower half whitish, upper deep red ; legs externally reddish ; vertex, thorax, and abdomen like wings ; abdomen with a reddish stripe on sides of anal segments.

Expanse of wings : 30 mm.

1 ♂.

Nearest to *P. lapidata* Warr. from St. Aignan.

#### 54. *Perixera sublanuginosa* spec. nov.

*Forewing* : bone-colour, dusted with fine reddish atoms ; costa tinged with grey ; the cross-lines grey ; first near base, marked also by reddish black dots on veins, and by additional dots on costa and subcostal vein nearer base, and on the folds ; a distinct dot at base of wing ; cell-dot small, blackish ; median shade grey, zigzag ; outer line grey, lunulate-dentate, the teeth distinctly marked with red-black vein-dots ; submarginal line pale, rather wide, between two macular grey shades, the inner interrupted ; black marginal dots between veins, and minute red points at their ends ; fringe bone-coloured.

*Hindwing* : similar, but the cell-spot round, pale, with dark ring.

Underside pale ochreous, in forewings flushed with pale rosy ; the outer line of points and the marginal dots reddish ; base of both wings with a bed of furry hairs to middle, larger in forewings and deeper ochraceous.

Face and palpi ochreous below, dull red above ; vertex, thorax, and abdomen pale ochreous, speckled with reddish and black ; abdomen with row of dark dorsal spots.

Expanse of wings : 26 mm.

2 ♂♂.

Exactly like *P. anulifera* Hmps. from Ceylon ; and also agreeing with examples examined from Penang.

The type of *anulifera* being a ♀, it is probable that the hairy clothing of the underside would not be present, or at all events not conspicuous. I have seen one ♂ from Ceylon apparently belonging to *anulifera* which presented no hairy appearance, as far as I remember ; but as my attention was not particularly directed to this point, I may have passed it over.

#### 55. *Pisoraca simplex* spec. nov.

*Forewing* : bone-colour, greyish along costa, very thickly dappled with pale purplish atoms arranged in striae ; the lines purplish grey, the basal outcurved above and below the median vein, the teeth faintly marked with purplish dots ; a sinuous dentate-lunulate purplish grey median shade at two-thirds ; a lunulate-dentate grey outer line at five-sixths, thickened between the veins internally and marked with dull purplish dots on the teeth ; a marginal line of distinct purple dots between the veins and minute ones beyond them ; fringe paler, ochreous-tinged ; cell-spot grey, very obscure.

*Hindwing* : with inner line marked from cell to inner margin ; the rest as in forewing ; the lines and markings clearer.

Underside of forewing, except along inner margin, deep rosy, of hindwing whitish; outer and marginal lines of spots distinct, the latter especially so in forewing, where they are deep red and triangular.

Face and palpi pale below, deep red above; vertex, thorax, and abdomen like wings, the last stained with reddish.

Expanse of wings: 26 mm.

1 ♂.

Apex of forewing slightly prominent.

#### 56. *Problepsis craspediata* Warr. and ab. *longimacula* nov.

The description in Nov. Zool. iv. p. 222 was made from a single ♂ from Simbang. The comparison of a good series (9 ♂♂, 6 ♀♀) collected by A. S. Meek on the Upper Aroa River, British New Guinea, shows that the aggregation of black scales, which follows the discocellular of the forewing, normally takes the shape of a black spot followed by a black half-circle. In two of the ♂♂, however, these scales form a large oblong black blotch stretching towards, and in one of them touching the outer line, and in this latter case the hindwing also has a black blotch beyond the slender discal mark. They may be distinguished as ab. *longimacula*.

#### 57. *Problepsis transposita* spec. nov.

*Forewing*: greyish cream-colour; the costal edge brownish; first line very faint, erect from one-third of inner margin, not reaching costa; from inner margin shortly before anal angle a brown band rises, at first parallel to hindmargin, then evenly curved inwards to subcostal vein at two-thirds, where it turns and descends parallel to its outer course, bending inwards at vein 2, to inner margin at three-fifths; the whole surface of the wing from base below subcostal vein as far as this inner line is spangled with metallic scales, which are thicker and almost hide the brown on the inner line and form a lustrous edge on the inner side of the outer line; between veins 2 and 4 the ground-colour between the brown shades is pale buff, containing a velvety black roundish centre crossed by vein 3, which is also buff; this buff space, like the black disc, is flattened above and surrounded by a slight ring of brownish scales; a submarginal grey line retracted to costa before apex; extreme hindmargin grey-tinged; fringe concolorous.

*Hindwing*: with a central and submarginal curved band, the latter with a lustrous sinuous line along its inner edge, the bands incompletely meeting below vein 7; the rest as in forewing.

Underside dull cream-coloured, with the dark markings showing through.

Palpi ochreous, externally dark fuscous; face brown above, dusted with pale below; vertex and antennae brown; thorax, shoulders, and patagia shining white; abdomen grey-tinged; underside and legs cream-coloured; forelegs fuscous in front.

Expanse of wings: ♂, 35 mm.; ♀, 40 mm.

1 ♂, 1 ♀.

Easily recognised by the difference in the position of the ocelloid spot.

#### *Prostenodes* gen. nov.

A development of *Perixera*.

*Forewing*: in ♂ narrowed, only slightly widening outwards; in ♀ of normal

shape ; costa hardly curved ; apex rounded in ♂, pointed in ♀ ; hindmargin nearly vertical ; inner margin rather convex in ♂, straight in ♀.

*Hindwing* : one-third broader than forewings in ♂ ; anal angle squared ; hindmargin subcrenulate, and nearly straight in ♂ from anal angle to vein 6 ; apex rounded.

Palpi of ♂ shorter than in *Perixera* and the allied genera, of ♀ quite as long ; antennae of ♂ bipectinate for two-thirds ; hindtibiae in both sexes with four spurs ; forewings of ♂ in basal half below subcostal vein clothed with rough furry scales.

Neuration as in *Perixera* ; forewing without areole.

Type : *Prostenodes comosa* spec. nov.

In appearance the type species resembles *Pachythalia rotundata* Warr. from Penang, but that, like *Pisoraca*, has only three spurs on the ♂ hindtibia.

#### 58. *Prostenodes comosa* spec. nov.

*Forewing* : pale wood-brown, in the ♂ more reddish-tinged, thickly dusted with fuscous atoms ; costal area in ♂ broadly pale grey with blackish speckling ; in ♀ concolorous with rest of wing ; a blackish, somewhat linear, cell-spot ; followed by a dentate grey median fascia, narrower in the ♂ and more deeply insinuate below middle ; an outcurved lunulate-dentate outer line, the teeth darker on the veins ; submarginal line paler, more distinct in the ♀♀, preceded and followed by grey bands ; cell-spots black ; fringe paler ; in the ♀ there are traces of a twice-curved inner line, which is hidden in the ♂ by the rufous furry scaling.

*Hindwing* : like forewing ; the cell-spot blacker ; the markings clear in both sexes.

Underside of ♂ deep rosy in both wings, the hindwing only becoming paler towards inner margin ; the cell-spots and all the outer lines deeper ; in ♀ only the forewing are washed with rosy and the hindwing remain ochreous, with the lines reddish.

Palpi pale beneath, reddish above ; face whitish beneath, brown-red above ; vertex and antennae whitish ; thorax and abdomen like wings ; but in the ♂ the shoulders and base of patagia are grey, dark-speckled, like the costal streak ; dorsum red-spotted.

Expanse of wings : 30 mm.

1 ♂, 3 ♀♀.

#### 59. *Ptychopoda lividula* spec. nov.

♀. *Forewing* : pale lilac-grey, speckled with darker ; costa yellowish ochreous with lilac-grey striae ; three pale dull olive-yellowish bands ; first, rather obscure, at one-fourth, outcurved from costa to submedian fold ; second median, slightly insinuate beyond cell, bent outwards below median vein ; third from three-fourths of costa to inner margin before anal angle, more wavy, insinuate beyond cell ; some small pale patches along hindmargin ; marginal line dark lilac-grey ; fringe olive-yellowish, slightly grey-chequered.

*Hindwing* : without basal line, otherwise similar.

Underside much paler, the markings showing through.

Face and palpi dark brown ; vertex and shoulders pale ochreous ; thorax and abdomen like wings.

♂ dark livid grey, the lines narrower but more distinct owing to the darker ground-colour ; fringe dark grey Underside uniform dark grey.

In both sexes the hind and inner margin of forewing are of equal length, but the forewing in the ♂ is narrower, the apex more prolonged, the outer margin more oblique. The hindwing has the inner margin somewhat concave in both sexes; but while the hindmargin in the ♀ is fully rounded, in the ♂ it is nearly straight and the anal angle prominent, clothed beneath with a bed of rough coarse scales.

Expanse of wings: 17 mm.

5 ♀♀, 2 ♂♂.

The ♀ greatly resembles *P. scintillans* Warr. from Australia, the type of which, however, is a ♂, and both are manifestly related to *aurieruda* Butler, which Meyrick also records from Australia.

#### 60. *Stibarostoma furcata*.

*Perixera furcata*, Warr., Nov. Zool. iii, p. 375 (1896).

I have hitherto only seen 2 ♀♀ of this species, the type from Moroka, British New Guinea, and a second from Isabel Island. The ♂, an example of which has just come from Upper Aroa River, British New Guinea, collected by Meek in February 1903, has the palpi of *Stibarostoma*, the hairs above on the thick second joint erect and as it were brushed back.

### SUBFAMILY HYDRIOMENINAE.

#### *Aeschrostoma* gen. nov.

Distinguished from all other genera of the *Hydriomeninae* by the structure of the palpi; all three segments are clothed with a brush of long hairs porrect and slightly drooping, that on the basal segment not reaching so far as the others, the segments themselves being quite concealed; the frontal tuft is similarly though more shortly clothed; the antennae (♀) are lamellate; the hindmargin of the forewing is slightly, of the hindwing distinctly, crenulate. The genus is related to *Coenocalpe*.

Type: *Aeschrostoma marmorata* spec. nov.

#### 61. *Aeschrostoma marmorata* spec. nov.

*Forewing*: whitish, tinged and dusted with reddish; a reddish brown central fascia occupies the middle third of the wing, its outer edge angled outwards below vein 4 and insinuate on the submedian fold, its inner edge indented in cell; it is crossed by three darker lines edged and dusted with whitish scales, and margined on both sides by a pale band with dark centre; basal patch reddish, crossed by a pale line in middle; marginal area whitish; submarginal line waved, indistinct except where preceded, at costa, beyond cell, and on submedian fold, by blackish lunules, and followed in each case by a reddish fuscous shade; a dark festooned marginal line; fringe reddish with pale base and chequered with dark beyond veins.

*Hindwing*: very similar, with a single thick basal line; the dark marginal border broadly interrupted at middle by the pale ground-colour.

Underside suffused, except along inner margin, with vinous red; the cell-spots, the three inner lines, and the subterminal blotches velvety black; the veins dotted alternately with dark and light.

Face, palpi, shoulders, and patagia mixed reddish and grey; the thorax and

basal segments of abdomen paler; abdomen with pale and dark rings, corresponding to the bands of hindwings.

Expanse of wings : 26 mm.

1 ♀.

62. *Anapalta aurifera* spec. nov.

*Forewing* : olive-green, the markings deeper green; basal patch dark green, crossed by a pale green line, its outer edge curved between the veins; band following it similarly curved, pale green with dark middle line; central fascia with two dark green lines, the first broader; the middle space narrow, blackish green, forming an annulus on inner margin; this is followed by five lunulate-dentate green lines, the teeth pointing inwards and marked paler on the veins, the two innermost forming the outer edge of central fascia, the next two the usual pale band following it, which is tinged with yellowish beyond cell; submarginal line distinctly lunulate-dentate, whitish or yellowish green, preceded by darker shades at costa, beyond cell, and above inner margin; a slight oblique pale apical dash; marginal lunules black between the veins; fringe dark green.

*Hindwing* : bright orange; the inner margin broadly, the apex narrowly, and the whole fringe dark olive-green; marginal line black, waved; traces of dark lines and a pale submarginal along the dark inner margin.

Underside of forewing olive-fuscous, the cell and a large blotch below costa beyond outer line orange; costa with pale streaks; hindwing orange with the inner margin, the hindmargin narrowly, and the fringe, dark olive-green.

Head and thorax olive-green mixed with black; the metathoracic boss sub-metallic; abdomen dark cinereous above and below; legs blackish with pale rings.

Expanse of wings : 40 mm.

1 ♀.

Palpi upcurved in front of face.

63. *Anticlea subcaesia* spec. nov.

*Forewing* : ochreous, tinged with grey, or reddish grey; the basal and inner marginal areas generally suffused with slate-colour; the markings black; basal area limited by a curved dentated black band and crossed by another, the space between them slate-colour, and the extreme base rufous; central fascia with both edges dentate, the inner from before middle of costa to middle of inner margin, the outer from two-thirds of costa to three-fourths of inner margin, rather sharply projecting at veins 6 and 4, inbent between; the two bands forking above the median and enclosing a pale ochreous space containing the black linear cell-spot on its inner edge and forming annuli below; pale bands on either side of fascia distinctly dentate, with a darker waved middle line; submarginal line pale, dentate, preceded by two dark dentate lines and only distinct above the median; pairs of black marginal dashes at ends of veins with a small pale spot between them and a large pale spot between the veins, those on each side of vein 3 lengthened into dashes; fringe light and dark slate-colour.

*Hindwing* : slaty blue, with white dots at the vein-ends, and the fringe deeper.

Underside of both wings uniform dark slaty blue, exactly like the underside of some species of *Arycanda* from New Guinea.

Head and abdomen dark fuscous, varied with paler scales and sometimes slaty-tinted; thorax, patagia, and metathoracic tuft olive-ochreous or rufous. Underside of abdomen cinereous; legs blackish with ochreous joints; pectus black and white.

Expanse of wings : 35 mm.

4 ♀ ♀.

Easily distinguished by the slaty blue hindwing and underside. The abdomen is stout and heavy ; the palpi prolonged, but not so much as in the South American species of the genus ; the discocellular of hindwing is biangulate, the radial from the lower angulation.

#### *Crasilogia* gen. nov.

*Forewing* of the ♂ and *fore-* and *hindwing* of ♀ as in *Epirrhoë* ; *hindwing* of ♂ abnormal ; the apex rounded, hindmargin straight to end of vein 4, then excised and rounded, the inner margin short ; the upper surface clothed with thick layers of silky hair, which towards the ends of the three median nervules are semi-erect and curled over a blotch of black scales ; the inner margin furrowed beneath ; anal tufts of ♂ enormously developed, expanded and containing a lot of fine woolly down. Palpi porrect upwards, second segment long, third short and decumbent ; antennae simple in both sexes.

Neuration of forewing alike in both sexes ; cell half as long as wing ; discocellular vertical, oblique below ; vein 2 at four-fifths, 3 close before 4 ; radials normal ; 7, 8, 9 stalked, 10 anastomosing with 11 and again with 8, 9 ; hindwing of ♀ normal ; 6, 7 short-stalked ; the discocellular vertical in upper third, oblique in lower two-thirds ; radial from the angle, above the middle ; cell less than half of wing ; in the ♂ the cell is longer than half the wing, broad and prolonged below, the discocellular biangulate, the radial from the lower, outward angulation, and therefore below the middle ; veins 2, 3 and 4 shortened.

Type : *Crasilogia dispar* spec. nov.

#### 64. *Crasilogia dispar* spec. nov.

*Forewing* : dark olive-fuscous ; basal patch edged by a fine outwardly oblique white line angled basewards on submedian vein ; central fascia edged inwardly by a similarly oblique white line, parallel to the other and irregularly waved ; space between the white lines yellowish traversed by three fuscous lines ; central fascia much broader on costa than on inner margin, its outer edge running from three-fourths of costa to two-thirds of inner margin, with traces of paler and darker lines in it ; cell-spot large, irregularly rounded, black, ringed with white ; the fascia is followed first by a fine white line, irregularly waved and acutely dentate basewards on vein 7, then by a brown line followed by a yellow one edged by two dark lines ; submarginal line white, zigzag, distinct in the dark fuscous marginal area, which grows paler immediately before the margin ; the veins beyond submarginal line concisely pale, with a pair of large square black spots along the margin at their ends ; fringe pale, chequered with olive-fuscous.

*Hindwing* of ♂ silky white, the fringes white, except beyond the patch of black scales, where they are also blackish ; of ♀ dull greyish orange with the cell-spot and three waved grey lines of the underside showing through ; hindmargin darker, with the veins yellow ; fringe yellowish ochreous, chequered with fuscous.

Underside of ♀ dull ochraceous, the costa of forewing spotted with fuscous, and all the markings dull fuscous ; inner margin paler ; hindwing with cell-spot, a median line, three postmedian waved lines, and the border brownish fuscous ; fringes ochraceous with fuscous chequering ; underside of ♂ much paler ochreous, mixed

with whitish in the hindwings, with the markings as in the ♀, and a dull smoky patch below the black-scaled patch above.

Head, thorax, and abdomen yellowish mixed with olive-fuscous in the ♀, whitish and olive-fuscous in the ♂; the abdomen with pairs of dark white-spotted marks on each segment; face and vertex darker fuscous; palpi ochraceous; legs olive-fuscous, spotted with yellowish in ♀, with whitish in ♂; anal tufts of ♂ ochreous, the woolly down white.

Expanse of wings : 39 mm.

1 ♂, 2 ♀♀.

#### 65. *Gonanticlea sublustris* spec. nov.

*Forewing* : violet-grey with velvety brown-black markings, these all finely edged with yellow scales; edge of basal patch narrowly dark, oblique from one-sixth of costa to one-fourth of inner margin; central fascia with inner area pale violet-grey, the costal area broadly, the inner marginal narrowly, triangular, limited by two bands of velvety blackish; inner band with its inner edge indented strongly above median, slightly below, its outer nearly straight; outer band sinuous, nearly touching inner band below middle, its outer edge projecting tooth-like at vein 6, bent at vein 4, interrupted by a rufous brown shade between 4 and 6; followed by a band of violet-grey with darker lunulate outer edge, and this by a broader fascia of pale stone-colour, with a similar darker lunulate outer edge, containing above vein 6 two black lunules, the upper running into apex; marginal area brownish grey; marginal line formed of concise thin black lines, separated by the pale veins; fringe with basal half brown, apical half ochreous, chequered with brown beyond the veins; cell-spot black, close to the inner band of central fascia.

*Hindwing* : purplish fuscous, with black cell-spot, a small oblique black mark on inner margin at two-thirds, and some slight ochreous scales at anal angle; marginal lines thicker; base of fringe yellowish.

Underside purplish fuscous; the basal two-thirds of forewing thickly clothed with hair, which viewed from base is lustrous; fringe brown, mottled at the veins, with base and tips yellowish; hindwing without hairs, more purplish, dusted with ochreous, with velvety black cell-spot and sinuous postmedian line of spots on veins.

Palpi below ochreous, above and externally purplish fuscous, edged with ochreous; face ochreous, speckled with purplish; vertex, collar, shoulders, patagia, and thoracic tufts purplish, edged with ochreous scales; thorax and abdomen purplish grey; dorsal segments with pairs of purplish fuscous spots edged with ochreous; antennae spotted with ochreous; legs purplish fuscous, speckled with ochreous.

Expanse of wings : 35 mm.

1 ♂.

#### *Tripteridia* gen. nov.

♂. *Forewing* : triangular; costa strongly arched at base and hardly convex before apex; hindmargin deeply cleft below vein 3, vein 2 abbreviated, running to end of cleft, which is fringed throughout, vein 1 running into the anal lobe, which reaches only half-way up the cleft.

*Hindwing* : aborted; costa bent and curved downwards to a sharp point, this broad part of the wing traversed by the costal and two subcostals, which are curved downwards and distorted; the hindmargin below these veins deeply cleft and

forming a fringed and rough-haired long middle lobe ; inner margin occupied by a convoluted, thickened, long spatulate lobe separated from the middle lobe by a cleft which runs up to base of wing ; the whole wing rough-haired and the lobes fringed.

Thorax and abdomen crested. Palpi long, much as in *Rhinoprora* Warr. Antennae lamellate, finely pubescent. Hindtibiae with four spurs. Nervation of forewing as in *Tephroclystia*, 10 and 11 stalked, 10 anastomosing with 8, 9. As the specimen is unique, it is inadvisable to denude the hindwing ; as far as can be seen without denudation, the median veinlets traverse the middle lobe, and the submedian the inner lobe.

Type : *Tripteridia novella* spec. nov.

Although the hindwing is trilobed and contorted, the genus appears to be an independent development of *Tephroclystia*, and not connected with *Lobophora* and its allies.

#### 66. *Tripteridia novella* spec. nov.

*Forewing* : pale green ; the markings brown-black ; basal patch limited by a broadish dark band, angled below costa, and crossed by a fine green band with dark centre ; central fascia with its inner half consisting of a broad band also angled below costa, its outer of two irregular dark lines ; the pale bands on each side of it green with a darker middle line ; a dark triangular costal spot before apex, a second on hindmargin beyond cell and a smaller blotch below above the cleft ; all these markings are plain only above the median vein ; below it they are obscured and partially interrupted by a chocolate-brown shading, which includes the outer edge of the basal patch and the inner half of the central fascia, the outer half of the latter below vein 3 being interrupted by a patch of bluish scales ; a row of black marginal dashes between the veins ; fringe pale green, chequered with fuscous.

*Hindwing* : greyish ochreous, the hairs darker grey, the inner lobe purplish fuscous.

Underside of forewing pale green, the markings purple, a large purplish blotch filling basal half of wing and running to the cleft, leaving inner margin pale ; hindwing pale greyish ochreous.

Face, palpi, and collar green ; vertex, thorax, and abdomen a medley of green and purplish scales ; legs ochreous ; forelegs purple, tinged with ochreous ; pectus and forecoxae greenish-tinged.

Expanse of wings : 22 mm.

1 ♂.

#### 67. *Xanthorhoë lucrivata* spec. nov.

*Forewing* : dark fuscous to outer line ; the basal patch dark, with a small patch of glossy grey scales at extreme base ; followed by a broad slightly paler band, of which the outer edge is formed by two grey lines separated by a darker one, the inner grey line faintly reddish-tinged ; central fascia broad, with blackish cell-spot and central sinuous blackish line, its outer half very dark fuscous, the edge projecting below vein 4 towards hindmargin, then dentate-sinuate inwards to four-fifths of inner margin ; edged by first a silvery white line, plainest on costal half, and then by a vinous red band containing two dark lines, all parallel to outer edge of fascia ; submarginal line regularly lunulate-dentate, finely white, preceded above middle by a broad dark fuscous shade, narrowed below middle to thin dark lunules ;

marginal area paler between veins 3 and 4; a faint reddish streak from the red outer band towards apex above vein 6; marginal line waved, black; fringe shining blackish, with base interruptedly paler and a pale patch below vein 4.

*Hindwing*: similar; the central fascia with two dark bands across it; the lines beyond it wider and clearer.

Underside dull dark greyish fuscous, the lines darker; the outer and submarginal lines forming white spots on the veins, the outer marked by a large pale costal spot; fringe pale between veins 3 and 4.

Head, thorax, and abdomen dark fuscous.

Expanse of wings: 35 mm.

1 ♂, 1 ♀.

When fresh the wings are somewhat glossy.

#### SUBFAMILY TEPHROCLYSTIINAE.

##### *Adeta* gen. nov.

This genus differs from all others of the *Tephroclystiinae* that I have met with by the absence of any areole; the cell of the forewing, which is broad, is only one-third the length of the wing, the discocellular inangulate; vein 2 from just beyond middle of cell, 3 close before 4; radials normal; 7, 11, 10, 9, 8 all stalked from the end of cell; 12 curved downwards and closely approximated for a short distance just after the separation of 7, but not touching. Hindwing rather small, narrow, the hindmargin well rounded, with normal neuration. Palpi upturned in front of face, all three segment thick and squarely cut off at the ends; the forehead with a projecting tuft; hindtibiae with three spurs, two terminal, one median, as in *Megatheca* Warr.

Type: *Adeta semifascia* spec. nov.

##### 68. *Adeta semifascia* spec. nov.

*Forewing*: dark fuscous on an ochreous ground-colour; basal patch small, dark fuscous, crossed by two or three lines; the markings all more or less vertical; a pale band beyond basal patch narrow, with a waved central line; central fascia very broad, consisting of first a broad dark fuscous band, then two curved lines on a pale ground, followed by a slightly curved lunate-edged dark band; beyond this a narrow pale band with a waved line down it; marginal area dark fuscous with a regularly lunate pale submarginal line through it very near margin; a thin dark marginal line interrupted by large pale spots at the vein-ends; fringe dark fuscous with pale basal line; cell-spot black, in the inner dark band of central fascia.

*Hindwing*: pale at base; the central fascia with a simple thick dark inner edge, the outer edge well curved.

Underside with all the markings, dark and light, extremely concise and distinct.

Head, thorax, and abdomen fuscous; legs ochreous, the forelegs fuscous-tinged.

Expanse of wings: 22 mm.

3 ♀♀.

In connection with the unusual neuration of this species it may be well to remark that *Gymnoscelis cristata* Warr., which in shape of wings and stoutness much resembles the present insect, at first sight appears to agree with it in neuration, 7, 11, 10, 9, 8 all being stalked together; but here 11 anastomoses with 12.

Of *cristata*, described originally from the Jaintia Hills, I have seen examples from Penang and Port Blair, Andamans, and now again five examples; but all of these, like the three examples of *semifascia* just recorded, are ♀♀.

#### **Aniserpetes** gen. nov.

Intermediate between *Chloroclystis* and *Gymnoscelis*, the hindtibia in both sexes having only one middle spur. The neuration is that of *Chloroclystis*, 10 and 11 stalked and 11 becoming coincident with 12. *Adeta*, which also has three spurs only, has all five subcostals stalked together.

Type: *Aniserpetes purpureoviridis* spec. nov.

#### 69. **Aniserpetes purpureoviridis** spec. nov.

*Forewing*: deep green, the lines purplish, minutely crenulate; the first at two-fifths, curved; second at two-thirds, also curved outwards, bluntly bent on vein 6, and more sharply at vein 4; the green ground-colour is deepened towards each line, and pales off basewards; traces of crenulate cross-lines are visible before each line, one before first line purplish-tinged; the first line is followed by a fine whitish line, touching the cell-spot; submarginal line whitish, regularly dentate, interrupted, like the purplish shade preceding it, between veins 6 and 7 and between 3 and 4; below the median vein a purplish tinge is evident, especially towards anal angle; marginal line fine, interrupted by the pale veins; fringe greenish, tinged with rufous.

*Hindwing*: green; the outer line and cell-spot black and conspicuous.

Underside dull orange-green, purplish-tinged, with traces of the lines.

Head, thorax, and abdomen olive-green, varied with purplish.

Expanse of wings: 17 mm.

4 ♀♀.

#### 70. **Aniserpetes sordida** spec. nov.

*Forewing*: dull brownish grey, with very fine black atoms; lines obscure; first curved at one-third, second at three-fifths, projecting on veins 4 and 6, insinuate between; both lines brown and swollen on costa; outer line followed by a pale band with dark centre; submarginal line regularly dentate; all the veins finely sprinkled with black scales; a fine dark marginal line interrupted by pale dashes at the vein-ends; fringe brown, the outer half paler.

*Hindwing*: similar, the pale band beyond outer line broader; the submarginal line not dentate; a pale marginal spot between veins 3 and 4; the hindmargin is protuberant at middle, and incised below apex and before anal angle.

Underside shining brownish grey.

Head, thorax, and abdomen concolorous; the vertex whitish.

Expanse of wings: 12 mm.

1 ♀.

#### 71. **Chloroclystis pallidivirens** spec. nov.

*Forewing*: whitish green, with darker green shades, and tinged in parts with reddish; a dark line close to base; first line at one-fourth, outcurved in middle; second at three-fifths, crenulate, bluntly bent on vein 6 and more sharply at vein 4, dark green mixed with reddish scales; the basal and central areas showing traces of some waved green lines; a pale band with darker centre follows the central

fascia; submarginal line dentate, whitish, the teeth between 7 and 8, 4 and 6, 1 and 3 filled up with purplish; a purplish marginal line interrupted at the veins; fringe pale green.

*Hindwing*: with the outer line median, projecting in middle; the basal area within it tinged sparsely with reddish; the rest as in forewing; hindmargin projecting in middle with a sinus on each side.

Underside whitish, tinged with olive-green, especially towards apex of forewings.

Head, thorax, and abdomen dull greenish.

Expanse of wings: 17 mm.

1 ♀.

### 72. *Chloroclystis semirasata* spec. nov.

*Forewing*: pale grey-green, with all the transverse lines oblique outwards to middle, then reversed; first line at two-fifths, second at three-fifths, the space before them reddish fuscous crossed by narrow green lines; submarginal line preceded by reddish-tinged lunules between 7 and 8, opposite the cell, and between 2 and 3, all the lower part of the wing from base to margin below median and vein 2 greenish, the darker markings being erased.

*Hindwing*: with the outer line strongly marked, blackish, nearly straight; basal area slightly reddish; rest of wing with alternate whitish and pale green lines.

Underside whitish, the forewing tinged with olive-green.

Head, thorax, and abdomen greenish; the anal segment marked above with red.

Expanse of wings: 14 mm.

1 ♀.

### 73. *Eucymatoge falsidica* spec. nov.

*Forewing*: pale green, crossed by bands of darker green, tinged with purplish scales; the dark bands are four in number: two narrow, near base, separated by a pale line, and forming the basal patch, the extreme base being pale green; the third represents the usual central fascia, broader on costa than at inner margin, its outer edge projecting on veins 6 and 4 with a sinus between beyond cell; the fourth forms the inner edge of the submarginal line; the central fascia is edged by two glossy white bands centred by a pale green waved line; the submarginal line is shining whitish, obscurely waved, the marginal area beyond it green, containing a short dark streak below costa; marginal line dark purplish, waved; fringe whitish green, chequered with darker; cell-spot dark, in the central fascia; in the ♂ the central fascia is wider than in the ♀, and its edges form dark costal spots.

*Hindwing*: dull greyish fuscous, the outer margins broadly darker, with pale spots at the vein-ends; fringe pale.

Underside dirty ochreous, in the forewing suffused with cinereous; both wings with three curved dark central lines and broad dark grey hindmargin.

Head, thorax, and abdomen green; the collar, tips of palpi, patagia, and thoracic tuft purplish; anal segment in ♂ ochreous; forelegs fuscous; pectus green.

Expanse of wings: 22 mm.

1 ♂, 1 ♀.

The venuration is peculiar. Vein 11 is connected with 12 by a rather long bar; vein 10 is likewise connected with 11 by a short bar, and afterwards by another short bar with 7, 8, 9.

74. *Gymnoscelis festiva* spec. nov.

*Forewing*: greyish green first line at one-third, projecting above median, then oblique, preceded above median by a purplish shade, and crossed by two or three whitish lines, the base sometimes darker; outer line at three-fifths, curved to vein 5, then forming a blunt projection to vein 2, and a smaller one below, preceded by a purplish suffusion which pales off into greenish towards first line; both lines finely edged externally with whitish; submarginal line dentate, whitish, preceded by reddish lunules at costa, beyond cell, and above inner margin, and followed by reddish suffusion beyond cell and at anal angle; marginal line fine; fringe pale.

*Hindwing*: with outer line dark and projecting below median; a dark cell-spot; the rest as in forewing; inner margin and the fringes thereof thickly black-dusted: the submedian interspace pale without markings.

Underside whitish, tinged with greenish on forewing, with the outer line and cell-spots shown.

Head, thorax, and abdomen whitish green.

Expanse of wings: 20 mm.

2 ♀♀.

Mimics *Chloroelystis rufifascia* Hmps. n.

75. *Rhinoprora lineola* spec. nov.

*Forewing*: purplish brown and grey; the basal patch and central fascia wholly, the band before submarginal line interruptedly, purplish brown; marginal area beyond outer line purplish grey; basal patch and central fascia edged by a very fine white dark-margined line, which on each side of the fascia is followed by an olive-yellow band; in the space beyond basal fascia this band is preceded by a thicker band of mixed brown-grey and whitish scales broadening to costa, and in the outer space is followed by a thick waved brown line; all the dark markings and lines are finely mixed with vinous scales, especially along costa, where the paler markings become red; a line of black marginal lunules; fringe deep, dark purplish, the basal half darker, followed by a darker line in the paler outer half; the whole darker-chekered beyond veins.

*Hindwing*: rosy ochreous, grey-tinged towards hindmargin, with dark cell-spot and curved central line; marginal lunules and fringe as in forewing.

Underside rufous, suffused with purplish grey, most thickly along hindmargins, and sprinkled with white scales; the lines more or less indicated on costal half of forewing, the cell-spot and central line of hindwing black; submarginal line a row of white spots.

Vertex, face, and palpi internally ochreous mixed with reddish; palpi and frontal cone externally black; thorax and abdomen a mixture of purplish fuscous and reddish scales, the segmental rings purplish with reddish tips; abdomen beneath and all the legs black, mottled with ochreous scales; antennae black.

Expanse of wings: 22 mm.

4 ♂♂, 2 ♀♀.

In this species the basal segment of palpi forms a beak below like the second segment above; and the venation is that of *Eucymatoge*, 10 anastomosing with 11 and 8, 9; the antennae have thickened angular segments, pubescent in the ♀, in the ♂ with two pairs of fine fascicles from each segment; the anal tuft of ♂ is palpably bifid.

76. *Tephroclystia miranda* spec. nov.

*Forewing*: pale mauve, without speckling; crossed by three pale green waved bands, edged with darker mauve; first curved near base; second at one-third, bent below costa; third, wider, at two-thirds outcurved in midwing; the ground-colour is deeper from base to second band and in a shade beyond third band, which is widened at costa; cell-spot dark, rather large; fringe glossy mauve.

*Hindwing*: uniform pearl-grey, darker towards hindmargin.

Underside pearl-grey, darker in the forewing, the markings showing through.

Palpi green; head, thorax, and abdomen mauve. The body of this unique and beautiful specimen has unfortunately become mould-covered, and the colour of head and thorax are not accurately visible.

Expanse of wings: 22 mm.

1 ♀.

*Thamnocausta* gen. nov.

♂. *Forewing*: broad; hindmargin somewhat protuberant below middle and indented above anal angle; inner margin distinctly convex.

*Hindwing*: narrow, almond-shaped; inner margin short; hindmargin from anal angle to vein 2 straight, thence rounded. Costal half above uncoloured, with an oval patch of mealy scales beyond upper end of cell, corresponding with a similar area on underside of forewing, as in *Ardonis*, but all the scaling dull, not glossy and nacreous. On veins 1 and 2 a thick clump of hairs before anal angle, that on vein 2 doubled, containing in the hollow between them a bed of mealy scales; ♀ with normal hindwing.

Palpi large, porrected upwards, second segment rough-haired beneath, third small, pointed, decumbent. Antennae simple in both sexes.

Neuration as in *Chloroclystis*; but the cell of hindwing of ♂ broad, triangular; the discocellular biangulate, the radial from the lower outward angulation; the wing beyond the cell and at anal angle below with roughened hairs; in the ♀ the discocellular is straight, and the radial from the centre.

Type: *Thamnocausta malachitis* spec. nov.

77. *Thamnocausta malachitis* spec. nov.

*Forewing*: green; markings black; a black blotch on costa at base and an erect spot on inner margin represent the basal patch; central fascia represented by two waved bands, each consisting of two black lines, the first two forming a large black costal blotch, the second a smaller one, the bands ending at one-third and two-thirds of inner margin; submarginal line pale, waved, preceded on costa by a black blotch and beyond cell by two black lunules; marginal line black, interrupted, most distinct at the indentation above anal angle; fringe green, chequered with darker beyond veins; costa ochreous between the black spots.

*Hindwing*: with two curved dark lines forming central fascia, the outer double and projecting at middle; submarginal line obscure, indicated by two green shades; a black marginal lunule before anal angle; in ♂ the lines are wanting; the costal half is ochreous, with the oval patch brown; the tufts ochreous and rufous, the mealy scales between brown and black.

Underside green, shaded with grey in places; the lines black. In the ♂ the oval patch of scales beneath forewing is ochreous; in the hindwing the veins are

black-marked and clothed with rough scales, and there is a patch of rough black-and-white scales at anal angle.

Head, thorax, and abdomen green; second segment of abdomen sometimes with a blackish ring, or black scales; sometimes the tips of palpi, collar, and abdomen fade to ochreous.

Expanse of wings: 26 mm.

1 ♂, 3 ♀♀.

The markings are variable in intensity; in one of the ♀♀ the central fascia is reduced to the two black costal marks, its edges only being shown by black dots; the submarginal line is white and distinct throughout, followed by dark patches at apex, anal angle, and beyond cell.

The species described by me as *Chloroclystis seminotata* (Nov. Zool. v. p. 245) from Mailu, British New Guinea, is very near, and will very likely, when its ♂ is discovered, be found to belong to this genus.

#### SUBFAMILY TRICHOPTERYGINAE.

##### 78. *Anisocolpia aroensis* spec. nov.

*Forewing*: greenish ochreous, almost wholly suffused with fuscous tinged in parts with olive and in parts with rufous; the lines darker fuscous, or blackish; basal patch small, greenish ochreous, edged by a blackish line, with an inner black line below median vein; inner edge of central fascia from one-fourth of costa, strongly excurved and forming two blunt projections outwards on subcostal and median veins, sharply angled basewards on submedian fold, then oblique outwards to middle of inner margin; space preceding it crossed by four fuscous bands, the first contiguous above median to basal patch, the second broad, the outer two narrow and parallel to inner edge of fascia; outer edge of central fascia from two-thirds of costa to shortly before anal angle, irregularly oblique outwards to below vein 6, then sharply dentate inwards and outcurved towards inner margin; within each edge are two darker lines; the centre of the fascia above median is pale ochreous and contains the oblique black linear cell-mark on its lower edge; across the fascia between the submedian fold and vein is a streak of black scales; beyond the fascia are four dentate sinuate lines, the first two forming the usual pale band; submarginal line pale, interrupted, followed by a thick dark crenulate line; large broad black marginal spots, the margin between them linearly whitish; fringe chequered light and dark; the space between veins 3 and 4 is greenish ochreous, obscuring but not interrupting the transverse lines; an apical spot slightly paler; the whole quadrate apical space between the pale costal half of central fascia and above vein 4 darker than rest of wing.

*Hindwing*: dull grey, darkening towards hindmargin; the fringe paler.

Underside dull cinereous, somewhat greenish-tinged; cell-spot and outer line darker; the costa with three pale spaces, at middle, beyond outer line, and at apex.

Palpi speckled, dark fuscous, the tips of all the segments ochreous; face, vertex, thorax, and abdomen olive-green mixed with grey; base of patagia laterally white; basal, middle, and anal segments of dorsum with dark rings; foretibiae and tarsi dark fuscous with pale rings; antennae annulate, olive-green and paler.

Expanse of wings: 37 mm.

1 ♀.

79. *Holorista seminigra* spec. nov.

*Forewing*: pale shining green, crossed by a succession of olive-green irregularly sinuate and dentated lines; three close to base, five forming a central fascia, the inner two and outer three coalescing on costa into blotches; four beyond, of which the second is thickest, the fourth not dentate and submarginal; a row of large black spots at the vein-ends; fringe pale green; the lines beyond the middle are more strongly dentate and sinuous.

*Hindwing*: with the costal half whitish, the lower half blackish, the limiting line straight; basal lobe small and semi-erect, the margin below it distorted, the usual three outer lobes ill-defined, the clefts being short, and the lobes overlapping; fringe pale towards costa, blackish below; a curved black pencil of hairs from base of lobe as in *fasciata* Moore; palpi very long, green, the terminal segment darker; antennae blackish; vertex, thorax, and abdomen green. In the ♀ the central fascia is purplish, the third line from base and the second thicker line beyond central fascia purplish-tinged, as is the marginal area.

Underside greenish cinereous, darker in forewing; the lower half of hindwing of ♂ deep black.

Expense of wings: ♂, 26 mm.; ♀, 29 mm.

1 ♂, 1 ♀.

## SUBFAMILY DEILINIINAE.

80. *Aplochloa subflava* Warr.

This species was described from a ♀ only (cf. Nov. Zool. iii. p. 392) from Humboldt Bay, Dutch New Guinea. It was distinguished from *A. vicilaca* Wlk. by the deep yellow underside. In his paper in *Trans. Ent. Soc.* 1902, p. 603, 604. Col. Swinhoe sinks it to *vicilaca*, on the ground of its being faded. I have just seen a ♂ from the Upper Aroa River, British New Guinea, taken by Meek in February 1903, which effectually disproves the correctness of this opinion. The insect in question, except that it has lost the abdomen and hindlegs, is in good condition. Both wings are dull olive-green with rather large purplish cell-spots; the costa of forewing thickly striated with purplish; the hindmargin with three purplish marginal spots below costa; both wings with traces of a postmedian line of purplish striae, incomplete in forewing, curved and entire in hindwing. The underside of both wings is deep dull yellow, becoming red-tinged towards hind-margins. But what separates this ♂ at once is the size and structure of the hindwing: this is disproportionately large for the size of the forewing, and the inner margin is developed into a large flap with a kink on its edge at one-third from base, into which the shortened and contorted submedian veins run; this flap, though coloured green above, like the rest of wing, is hollowed out beneath, whitish, not yellow, in colour, and clothed with pale hairs. The insect is probably peculiar to New Guinea. Besides the original ♀ type from Humboldt Bay I have seen only one other, taken, also by Meek in February, in 1899 at Milne Bay, British New Guinea.

81. *Eugnesia decolorata* spec. nov.

*Forewing*: cream-colour, dotted with dull reddish fuscous; the two lines grey; the first at one-fourth, vertical, but outcurved above and below median; the second, nearly straight, at two-thirds; both with black dots on the veins and on costa and

inner margin, in the first on the inner edge, in the second on the outer; submarginal line preceded by spots between the veins, the two above and below vein 6 blotched together, that below vein 4 preceded by a grey cloud; the speckling beyond the submarginal sometimes also massed into slight spots on the veins, of which that on vein 6 is always larger and greyer; a black spot at base on median vein, a black discal spot, and black marginal spots; fringe like wings.

*Hindwing*: similar; the inner line grey without spots; no grey blotch below vein 4.

Underside without speckling, and with the markings grey.

Head, thorax, and abdomen concolorous; the shoulders, the patagia, and each dorsal segment with a pair of black spots; palpi externally blackish; the foretibia and first tarsal segment dark.

Expanse of wings: ♂, 26 mm.; ♀, 30 mm.

1 ♂, 2 ♀♀.

These are identical with the straw-coloured fourth form of *varians* alluded to below.

### 82. *Eugnesia lineata* Warr.

Like the last species *E. decolorata*, but with darker speckling; the costa of forewings black; the lines all black and concise; the shades before and beyond submarginal line darker, subdentate, and more or less entire; the blotch on vein 6 black; a straight black streak from outer line to hindmargin between veins 3 and 4, and a less marked one along vein 6; all the rest as in *decolorata*, but with the black markings intensified.

Expanse of wings: 34 mm.

2 ♀♀.

This is the form described by me as *Syntaracta varians* ab. *lineata*.

Swinhoe was probably right (cf. *Tr. E. S.* 1902. p. 606) in considering it a distinct species, although his sinking the other two forms to *camptogrammaria* proves to have been premature.

### 83. *Eugnesia varians* Warr.

In Nov. Zool. i. p. 409 (1894), I described 5 ♀♀ from Gunong Ijan, four of which varied somewhat from one another, as *Syntaracta varians*, differentiating the most marked form as ab. *lineata*. I have not met with another example of any of these forms till now, when the three most variant have turned up among the insects caught by A. S. Meek on the Upper Aroa River, British New Guinea; two of these are represented by ♂♂ as well as ♀♀; and these ♂♂ having perfectly simple antennae, it follows that the species must be transferred to the genus *Eugnesia*. With them came also three examples, all ♀♀, of *Eugnesia correspondens* Warr. described from Luzon, and, except for a single example from Nias Island, only received hitherto from that locality.

Of the form first described, to which must be restricted the original name *varians*, there are three ♂♂ and thirteen ♀♀, the latter very close indeed to *Syntaracta camptogrammaria* Guen., the ♂♂ distinguishable at once by the antennae, the much darker costa, and the more bulging hindwings; they are also more brightly coloured than the ♀♀.

They are all dated February and March, 1903, and measure 32 to 34 mm. in expanse on the average, though small ♀♀ occur of 28 mm.

84. *Ingena lucifera* spec. nov.

*Forewing* : pearl-grey, iridescent in certain aspects ; the ground-colour being of whitish scales thickly dusted with grey, the darker shades lavender-grey ; costa deep brown ; inner shade obscure, from costa at one-third, bent on median vein and vertical to one-third of inner margin ; outer shade thick and diffuse, its outer edge obscurely dentate, from five-sixths of costa to two-thirds of inner margin ; cell-spot dark grey ; a dentate submarginal line close to margin ; the area beyond it dark grey ; fringe like the margin.

*Hindwing* : basal shade absent ; cell-spot diffuse ; basal area to outer line darker tinted ; the space between outer and submarginal lines, as in forewing, paler than the rest.

Underside smooth pearly grey, with a lilac tinge ; fringe darker.

Face and palpi dark brown, like costal edge ; vertex, thorax, and abdomen pearl-grey, speckled with dark. Underside of abdomen, pectus, and femora white ; tibiae and tarsi fuscous.

Expanse of wings : 32 mm.

12 ♂♂, 6 ♀♀.

The ♂♂ have a distinct fovea at the base of hindwing as in *Leucetaera*, but though all the subcostals are stalked together as in that genus, there is no anastomosis with 12, 11 only approximating at a point ; I refer it temporarily to *Ingena* with which it agrees in style of marking.

85. *Plectoneura subrubida* spec. nov.

Like *P. albida* Warr., differing from that species in the following points : the costa of forewing is smoky purplish black till just before apex ; the whole hindmargin is purplish black, broad at apex, where it is limited by an oblique pale streak, and narrowing to a point at anal angle ; in *albida* the costa is ochreous yellow, and the hindmarginal shade is slight, reaching to middle of wing only. Underneath, *albida* is white, tinged with reddish, with no dark shades ; in *subrubida* the whole underside is deep rosy ; the costa narrowly, and the hindmargin broadly, black in the forewing. Further the fringe of forewing is purplish black except just at anal angle ; in *albida* it is rufous throughout.

Expanse of wings : 34 mm.

4 ♂♂.

Along with these came 1 ♂, 6 ♀♀, of *P. albida*, showing that the difference between the species is not sexual only.

## SUBFAMILY BRACCINAE.

86. *Arycanda alternata* spec. nov.

*Forewings* : dull slate-colour, crossed by fine sinuous lines and series of spots, alternately dark slate-colour and blackish ; two curved basal lines, the inner dark slate, the outer marked by black spots on veins ; the middle line, curved outwards above round the small black cell-spot or sometimes touching it, slate-colour ; the line following consists of small black spots ; the next two of somewhat more elongated spots, slate-colour and black ; the submarginal of wedge-shaped spots elongated and almost touching the black marginal dots.

*Hindwing* : similar ; without the two basal lines.

Underside bluish slate-colour with a broad darker marginal border; the cell-spots round and black.

Head, thorax, and abdomen slate-colour.

Expanse of wings: ♂, 38 mm.; ♀, 44 mm.

7 ♂♂, 5 ♀♀.

87. *Arycanda concussa* spec. nov.

Very much like *A. flexilinea* Warr., differing as follows: the third and fourth lines on forewing are quite straight, the third oblique outwards, the fourth oblique inwards. The distance between them on inner margin twice as great as in *flexilinea*, the fourth passing just outside of the cell-spot, or sometimes through it, and then forming with the third an actual isosceles triangle; the three outer shades all more oblique outwards. The hindwing differs only in having all the inner lines straighter.

Expanse of wings: ♂, 44 mm.; ♀, 50 mm.

2 ♂♂, 3 ♀♀.

88. *Arycanda fasciata* spec. nov.

*Forewing*: slaty blue, of the same tint as *flexilinea* Warr. and *concussa* Warr., all the lines or shades sinuous, parallel to each other and to hindmargin; the outer of the two basal lines and the fourth darker than the rest and enclosing a darker blue central fascia containing the cell-spot and third line; the penultimate shade, which in *flexilinea* and *concussa* is macular, is continuous and merged in the deeper tinted hindmargin.

*Hindwing*: similar.

Underside with basal half of wings deeper bluish slate-colour than the outer. Head, thorax, and abdomen concolorous.

Expanse of wings: 50 mm.

1 ♀.

89. *Arycanda fritillaria* spec. nov. and ab. *interfusa* nov.

*Forewing*: pale slate-colour at base and broadly along costa and hindmargin; the inner triangular area pale chocolate-brown; three basal curved lines of large black spots: the first close to base consisting of three spots, the second of four, all these between the veins; the third of three spots, on the veins; a large black cell-spot, just beyond which is a series of seven spots on the veins, the first three oblique outwards and contiguous; in the marginal area are four series of spots, oblique outwards to vein 6, then slanting inwards, the innermost of eight spots on the veins, the other three of spots between the veins, those of the outer two separated only by the veins; a marginal series of black lozenge-shaped marks; fringe slate-colour.

*Hindwing*: with basal two-thirds chocolate-brown; the outer lines as in forewing; before the black cell-spot only three small black spots on veins, representing third line of forewings.

Underside dull slate-colour, with round black cell-spots on each wing; inner margin and fringe of hindwings pale ochreous.

Head, thorax, shoulders, patagia, and basal segments of abdomen slate-colour, all spotted with black; palpi externally black; abdomen yellow, with black blotches on third and fourth segments and on anal segment of ♂.

Expanse of wings: ♂, 52 mm.; ♀, 60 mm.

8 ♂♂, 6 ♀♀.

In the ♂ for which I propose the name ab. *interfusa* there are only three outer lines; the innermost of the usual four being shifted inwards and forming elongate black blotches on the veins touching the spots of the central line, the topmost spots of the third series, the central and the outer one coalescing to form a large black costal blotch above the cell-mark. In the hindwing the shifted series appears as a series of thin lines on the veins immediately beyond the cell-spot. In all other respects, the aberration agrees with the type-form.

1 ♂.

90. *Craspedosis casta* spec. nov.

*Forewing*: white, costal region above subcostal vein black; outer half of wing black, its inner edge curved from below middle of costa to four-fifths of inner margin.

*Hindwing*: white, with broad black hindmargin; the abdominal margin broadly yellow-tinged; fringes of both wings black.

Underside like upper.

Head, palpi, shoulders, and base of patagia black; legs blackish; thorax and rest of patagia white; abdomen yellow both above and below.

Expanse of wings: 48 mm.

1 ♀.

91. *Craspedosis flavicollis* spec. nov.

*Forewing*: velvety black; a paler broadish fascia near base and an outwardly curved narrow band from four-fifths of costa to two-thirds of inner margin; a large oval hoary grey spot on discocellular; fringe black.

*Hindwing*: deep black, with an irregularly pentagonal white blotch in the centre.

Underside of forewing dull black with the discal blotch white; of hindwings with the white space more nearly round.

Palpi beneath, lower part of face, shoulders, and base of patagia orange; the rest of the body black; legs and abdomen beneath black.

Expanse of wings: 39 mm.

2 ♀♀.

92. *Craspedosis laticlava* spec. nov.

*Forewing*: purplish black, with a broad white band from subcostal vein just before middle of wing to vein 1 before anal angle, its edges parallel.

*Hindwing*: without markings.

Underside the same; a slightly paler patch at anal angle of hindwing.

Head, thorax, abdomen, and legs concolorous; anal tuft of ♂ ochreous.

Expanse of wings: ♂, 48 mm.; ♀, 54 mm.

1 ♂, 2 ♀♀.

Except for the broad white fascia of forewing this species is identical with three others (2 ♂♂, 1 ♀), taken at the same time and place, which I refer to *C. funebris* Warr., the type from Fergusson Island.

93. *Craspedosis nigerrima* spec. nov.

*Forewing*: deep velvety black; a narrow oblique white streak, at three-fifths from base, from vein 6 to 3; fringe black.

*Hindwing*: with broad velvety black marginal border, narrowly produced along costal and inner margins to base, which is shortly black; centre of wing shining white.

Underside like upper, but the white markings larger, their edges diffuse; the streak of forewing broader, and running from subcostal vein to vein 2.

Head, thorax, abdomen and legs black; front of forefemora grey.

Expanse of wings: 38 mm.

1 ♂.

The abdomen of this ♂ is slender and elongate, as in *Stenocharta* Warr., but in other respects it agrees with *Craspedosis*, except that the fovea is absent.

Distinguished from *C. ovalis* Warr. by the wholly black abdomen and absence of fovea.

## SUBFAMILY ASCOTINAE.

94. *Alcis flaccida* spec. nov.

♂. *Forewing*: dull whitish, dusted with fawn-colour; the lines and markings darker; costa paler, with short fine striae and brownish spots at one-fourth and before one-half; first line at one-fourth, curved outwards above median, darker marked on veins, preceded by a diffuse shade; median shade irregularly dentate-lunulate, outcurved above and nearly touching outer line above inner margin; outer line from two-thirds of costa, vertical to vein 6 with slight indentations on veins 7 and 8, forming a deep outward sinus to vein 4, then oblique inwards to beyond middle of inner margin, forming another larger outward sinus from vein 3 to submedian fold, followed by a cloudy shade; submarginal line dentate-lunulate, pale, the lunules filled in with darker fawn-colour, except between veins 3 and 4; marginal dark spots between veins; fringe concolorous.

*Hindwing*: without first line; a slight ocelloid cell-spot between inner and outer lines, otherwise as in forewing.

Underside pale stone-colour, with slight greyish submarginal shade in forewing.

Face and palpi pale below, brownish above; vertex, thorax, and abdomen like wings; second segment of abdomen brown with black edges.

♀ with the lines black, the speckling fuscous, and the basal and marginal areas dark fawn, underneath greyer; the submarginal band complete and continued on hindwing; the cell-spots and outer line marked. The smaller and paler ♀ has a broad smoky brown band crossing both wings above, between the inner and median lines.

Expanse of wings: ♂, 44 mm.; ♀, 46—52 mm.

1 ♂, 2 ♀♀.

Ovipositor of ♀ long, exerted.

95. *Alcis papuensis* spec. nov. and ab. *decolor* nov., ab. *maculata* nov., and ab. *ocellata* nov.

♂. *Forewing*: pale ochreous, suffused and sometimes speckled with tawny and grey; costa with fine short black striae; base with a small tawny blotch; first line at nearly one-third, black-brown, angled on subcostal, then curved to near base of inner margin preceded by a diffuse tawny and grey shade; outer line from nearly

two-thirds, angled inwards above and outwards below vein 6, then oblique inwards and straight, but forming a sinus across submedian interval; this is followed by a parallel tawny and grey shade; median line passing inside or touching the black cell-spot and approximated to outer line at inner margin; submarginal line wavy, lunulate, whitish, the lunules above vein 7, between 6 and 4, and below vein 3 filled in with black, interrupted between by pale ochreous; marginal spots black; fringe ochreous, sometimes chequered with darker. Sometimes the pale areas along the submedian interspace become whitish; sometimes a tawny shade runs longitudinally above median and along vein 6.

*Hindwing*: without first line; the antemedian slightly sinuous, tawny, the postmedian sinuous, dented, and blackish; the rest as in forewing.

Underside pale ochreous; the forewings tinged with grey; cell-spots and outer lines slightly shown.

Head, thorax, and abdomen pale ochreous; head and thorax often darker, olive-ochreous; abdomen with basal segments often marked with black-brown.

♀ with wings much longer in proportion, suffused throughout with rufous, and marked with hoary grey along cell and submedian interspace and in the submarginal lunules; the only pale ochreous tint remaining being the submarginal line; all the markings as in the ♂, but the shades accompanying the inner and outer lines less conspicuous; the fringe greyer; ovipositor long, exerted.

The form of the ♂ above described was made typical as being nearest to that of the ♀. A second, apparently equally common with the type, may be known as ab. *decolor*; in this all tawny and dark grey shades disappear; the pale ochreous ground-colour is dusted with olivaceous ochreous; the two lines are marked only by dark vein-spots, and the shades accompanying them and the submarginal line are inconspicuous. Of this paler form two less common developments occur: in one, ab. *maculata*, the space between outer and submarginal line below vein 4 and the marginal space beyond, except between 3 and 4, is chestnut-brown; and the shade before first line of forewings and that beyond second line of hindwings on inner margin is of the same colour; the other, ab. *ocellata*, is suffused with rufous, and the cell-spots in both wings have pale centres within brown rings.

Expanse of wings: ♂, 35—40 mm.; ♀, 44—46 mm.

21 ♂♂ of the type-form; 18 ♂♂ of ab. *decolor*; 2 ♂♂ of ab. *ocellata*, and 1 ♂ of ab. *maculata*; and 4 ♀♀ only.

#### 96. *Blepharoctenucha albescens* Warr., Nov. Zool. iii. p. 400.

The description was made from a ♂ and two ♀♀ from S. Java, from Frhnstorfer's collection, taken in 1891, at an altitude of 1500 metres.

In *Trans. Ent. Soc.* 1902. p. 619, Colonel Swinhoe says: "These are South American insects with wrong locality labels on them. There is a ♀ in the B.M. registered San Pedro, Honduras (Frhnstorfer), which is probably the correct locality; they have not the appearance of Eastern insects."

Why the *three* labels in Coll. Rothschild should be wrong and the *one* label in the B.M. right, is not stated.

Among the insects lately received from New Guinea, from the Upper Aroa River, is a pair of *B. albescens* Warr., corresponding exactly with the types from Java; and as all the insects of this collection were sent home ready set, there can be no question about their Eastern origin, or erroneous labels. My friend Colonel Swinhoe must request the authorities at the British Museum to correct theirs.

97. *Elphos exalbata* spec. nov.

*Forewing*: white with a few grey striae; the basal third, a large square apical space, and a shallow blotch along inner margin at anal angle grey-tinted and speckled and mixed with yellow; first line at one-fourth, black, vertical, forming strong curves above and below the median vein; outer line commencing at two-thirds, dentate outwards and not reaching beyond vein 6, the lower part below vein 2 forming a deep sinus to vein 1 and an oblique line inwards to before middle of inner margin; submarginal line pale grey, only visible through the apical blotch, the white ground-colour invading the central fascia above middle and reaching hindmargin between veins 1 and 3, and the inner margin partially beyond middle.

*Hindwing*: with costal and hindmargins broadly grey-brown, the bluish-white lunulate submarginal line, the lunules filled up with dark, being uninterrupted, and the commencement of the outer line shown as far as vein 6, the whole interior of the wing being white, sparsely speckled with fuscous grey; on the inner margin the outer line is shown by a grey lunule, and three vein-spots mark the inner line.

Underside with basal two-fifths, apical third, and anal blotch smoky fuscous, the area between them, except along costa, white, without speckling, but with the veins across it black; hindwing white, with broad smoky black marginal border to near middle of costa.

Head and thorax grey; abdomen with basal segments pale grey, becoming yellow towards end; its underside yellow; legs fuscous; pectus ochreous.

Expanse of wings: 82 mm.

1 ♂.

98. *Gasterocome subdivisa* spec. nov.

*Forewing*: bright pale ochreous, the speckling and markings olive-brown; costa with close striations; a small blotch at base; a broad antemedian fascia with its outer edge curved, formed by a dark line rising from a costal spot; central fascia above middle formed of two blotches, one median, the other postmedian, of which the median is itself often subdivided from below; below middle of one curved triangular blotch, also subdivided on inner margin by a pale line; the outer edge of median patch and inner edge of postmedian formed by the usual median and outer lines; marginal area formed of two patches, through which the pale wavy submarginal line is conspicuous; a broad streak of pale ground-colour runs from base below median vein to hindmargin separating all these markings, the pale ground appearing as a short band near base, an inwardly oblique antemedian band, and a similar band from apex to two-thirds of inner margin, joined at middle by another from beyond middle of costa, forming a Y; the pale spaces are more or less speckled with fuscous and in the ♀♀ tinged with tawny; a row of marginal triangular spots between veins; fringe fuscous, with a dark middle line, and interrupted by ochreous at apex and between veins 3 and 4.

*Hindwing*: with basal half pale, coarsely fuscous-speckled, with an obscure antemedian and distinct sinuous postmedian dark line with a large ocelloid cell-spot between them; the outer line followed by a broad brown fascia, a pale band of ground-colour, and a marginal brown border containing the whitish submarginal line, which is preceded by black blotches.

Underside duller, with all markings reproduced.

Palpi ochreous, externally brown; face, vertex, thorax, and abdomen pale ochreous, deeper tinged in the ♀; sometimes even in the ♂ the face and vertex are also brownish; middle of shoulders, middle and tips of patagia fuscous; a pair of brown lateral spots on the two basal segments of abdomen, which are paler than the rest; legs ochreous, fuscous-speckled; fore- and multibiae and tarsi blackish, with yellow rings at the joints; subanal tufts dull ochreous.

Expanse of wings: ♂, 46 mm.; ♀, 44 mm.

8 ♂♂, 4 ♀♀.

#### 99. *Myrioblephara callichlora* spec. nov.

*Forewing*: bright pale green, finely dusted with olive atoms; costa ochreous with short grey streaks; a short line close to base; inner, median, and outer lines double, marked with rather large black spots on the veins; the inner more or less filled up with olive scales between the arms; the median distinct only at costa; the outer tinged with olive above vein 6, and between veins 3 and 4, this blotch extending to submarginal line, which is preceded by wedge-shaped marks filled up with olive and black scales below costa and beyond cell, and outlined only with olive below middle, followed also by a slight dark lunulate line with a blotch beyond cell; marginal spots large, black; fringe pale green, chequered with black beyond veins; cell-spot small, brownish.

*Hindwing*: whitish grey, tinged with pale green along inner- and hind-margins; the lines strongest on inner margin, the antemedian line there being black and double; the postmedian punctate on veins, its outer arm faint; the rest as in forewing.

Underside greenish white, tinged with grey in forewing; all the lines dark grey.

Palpi fuscous; head and thorax green, with a few olive scales; abdomen green at base, dark grey in middle, pale ochreous at anal end; underside ochreous; forelegs dark fuscous.

Expanse of wings: 26 mm.

5 ♂♂.

Near *M. picta* Warr. from S. Java.

#### 100. *Myrioblephara confusa* spec. nov.

This species agrees with *M. flexilinea* in the main; in particular the outer line of hindwing projects, as in that species, below middle, having a distinctly sinuous course, not parallel to inner line, and the three lines of forewing are at equal distances; it differs in the following points: it is altogether much darker and clouded grey, and is without any ochreous tinge whatever, the shades accompanying the inner and outer lines being dark grey and thick; secondly, the outer line of forewing is evenly curved from the costa without forming the prominent rounded elbow at vein 5 which characterises *flexilinea*. The lines generally are less interrupted, and the inner and outer lines, owing to the grey shade accompanying them, more distinctly double.

3 ♂♂, 2 ♀♀.

101. *Myrioblephara flexilinea* spec. nov. and ab. *albidata* nov. and  
ab. *fasciata* nov.

*Forewing*: greyish white, dusted with grey or ochreous grey; the lines blackish or dark grey from dark costal spots, outbent above and incurved on submedian fold, then again oblique outwards; all three at equal distances apart, the inner at one-third, the outer at two-thirds, both accompanied by a parallel shade which is always more or less ochreous; submarginal line pale, wavy, between darker grey clouds; a slightly paler patch below middle of margin; marginal spots large, blackish; fringe pale grey.

*Hindwing*: with diffuse double antemedian and postmedian dark grey lines, the latter insinuate in cell and projecting on veins 3 and 4, **not** parallel to inner lines: the rest as in forewing; cell-spots of both wings dark grey.

Underside dull dirty grey, with the lines, cell-spots, and outer margin darker. Head, thorax, and abdomen like wings; palpi externally darker.

Expanse of wings: 26 mm.

13 ♀♀, 4 ♀♀.

Distinguished by the sinuous outcurved second line of hindwing.

One form of the ♂, ab. *albida*, has the ground-colour quite white, and the markings consequently much clearer; the lines at costa black. Another, ab. *fasciata*, has the space between inner and median lines throughout and between inner and outer lines below middle filled up with smoky black on forewing; also the inner half of central space on the hindwing; and the ochreous tints beyond are more widely spread.

102. *Myrioblephara ligdiodes* spec. nov.

*Forewing*: whitish, speckled with grey and rufous, and towards hindmargin slightly tinged with rufous; first and second lines blackish, curved, parallel and near to each other, and both nearer than usual to the base of wing, the space between them filled up with purplish grey, forming a distinct fascia; outer line marked by a dark costal spot, curved outwards to vein 4 and only slightly oblique inwards below to beyond middle of inner margin, very faintly traceable by rufous scales; the rufous shade following it diffuse and well separated from it; submarginal line wavy, pale, preceded from costa to vein 5 by a curved black shade of lunules and followed by a dark shade between 6 and 4, the apex being left pale like the rest of the marginal area, except for a rufous cloud between veins 2 and 3; marginal spots slender; fringe white, with dark scales below vein 6; cell-spot wanting.

*Hindwing*: with a double black line near base, continuing the dark fascia of forewings; the two arms of the outer line scarcely traceable; hindmargin tinged with rufous and grey, with a darker waved shade before the indistinct submarginal line.

Underside whitish, suffused in forewing with rufous brown, with a dark line and cloud near base, a slender dark outer line, and a broad smoky black marginal border, which leaves the apex broadly and the hindmargin narrowly pale; hindwing grey-tinged, with broad curved inner and narrow outer line; the dark margin narrower; extreme margin and fringe white.

Face and palpi ochreous grey; collar white; thorax, shoulders, and patagia purplish fuscous; abdomen marked with purplish fuscous on basal half, becoming dull whitish towards end.

Expanse of wings : 29 mm.

1 ♀.

Superficially like the species of the genus *Ligdia*.

103. *Myrioblephara minima* spec. nov.

*Forewing*: whitish grey, darker speckled, and slightly tinged with fawn-colour; the lines very fine; basal line double, close to base, slightly outcurved above median vein; median line indistinct, except near inner margin, where it is waved and approaches outer line; outer line from two-thirds, nearly vertical, faintly curved from costa to submedian fold, where it is indented, thence vertical, marked on veins with small inwardly projecting black teeth, followed by a slight grey shade; submarginal line whitish, linnulate, between two dark shades, the inner one filling up the lunules and connected with the shade beyond outer line along costa and inner margin and beyond cell; a row of black marginal spots; fringe grey, with slight dark marks beyond veins.

*Hindwing*: with a black speck at base, thence to the straight antemedian line white, with a few black speckles; the rest of wing grey, and like forewing.

Underside dull fawn-tinged grey, with the lines, cell-spots, and marginal shade darker.

Head, thorax, and abdomen cinereous; first two segments of abdomen above white, with black speckles, like base of hindwing, third and fourth segments blackish, with white rings.

Expanse of wings : 22 mm.

1 ♂.

104. *Myrioblephara muscosa* spec. nov. and ab. *impleta* nov.

*Forewing*: white, washed with pale olive-ochreous, and covered with dense and short black striae; the lines black; a black spot at base of costa, and a curved black line just beyond running round the fovea, often obscure or obsolete; inner line at about one-third, curved; outer line at two-thirds, outcurved round cell, then sinuous to middle of inner margin; median line, sometimes obscure, strongly curved outwards round the black cell-spot, approaching outer line below middle; space within the bend of outer line nearly always white and generally without speckling; submarginal line, interrupted like the marginal area between veins 3 and 4, indicated by the darker preceding shade, which sometimes fills the linnules up with black, and by the darker marginal striae which follow it, the tips of the linnules showing white; some slight dark marginal marks; fringe chequered ochreous and dark.

*Hindwing*: generally paler, with two thick dark lines enclosing the dark cell-spot, the outer one sinuous, and an interrupted macular submarginal shade before submarginal line.

Underside like upper, but duller.

Head, thorax, and abdomen olive-ochreous, varied with black; palpi blackish externally; legs dark, ringed and spotted with ochreous.

Expanse of wings : 26—30 mm.

12 ♂♂, 2 ♀♀.

In nine out of the twelve ♂♂ the central and marginal areas, often the basal, are wholly suffused with dark olive and black, leaving only the large fovea and the

white spot within the bend of outer line whitish, the pale band beyond middle with its arm to outer margin being sometimes conspicuously olive-ochreous: this form, which is probably not confined to the ♂♂ only, may be distinguished as *ab. impleta*.

105. *Myrioblephara palumbina* spec. nov.

♂. *Forewing*: pale dull olive-green, speckled with dark; the markings brown and black; a small blotch at base; first line before one-third, angled in cell, then vertical, preceded by a similar line, the space between brown; outer line at three-fifths, sigmoid, bent outwards beyond cell, then concave to two-thirds of inner margin, followed by a deep brown parallel shade; median line parallel to outer and generally nearer it than to inner, outbent round the small cell-spot; submarginal line waved, preceded by a narrow brown shade only distinct at costa and inner margin; marginal area beyond it deep brown, interrupted at apex and between veins 3 and 4; black marginal spots united by a thin marginal line; fringe olive and brown.

In the ♀ the ground is pale dove-colour, tinged with olive, or grey, or brown; the striations and lines all clearer and more defined.

*Hindwing*: pale towards base, with a faint greenish tinge; outer line brown, sinuous, sometimes a faint straight antemedian line before the dark cell-spot; outer half suffused with rosy brown; the whole thickly striated with dark; a dark waved submarginal cloud.

Underside grey, tinged with ochreous, olive-green, or grey, and thickly dark-speckled, with the markings irregularly represented; marginal area in ♀ darker, broadly smoky brown.

Head, thorax, and abdomen corresponding to ground-colour of forewing: in the darker ♂ the head and thorax are dark olive-fuscous, the abdomen above cinereous, with a broad black band on second segment; in the other ♂ only the abdomen is fuscous from the third segment to the end; in the ♀♀ all are pale except a brown spot on metathorax and mark on second dorsal segment.

Expanse of wings: 35 mm.

2 ♂♂, 4 ♀♀.

The large unscaled fovea and the markings agree with *Myrioblephara*, though the cilia are shorter than in typical species.

106. *Myrioblephara pergrisea* spec. nov.

This species agrees with *M. subtrita* in having the two lines of hindwing parallel to each other, and the upper half of hindwing above median with the markings blurred; it differs in being wholly suffused with dull grey, especially the basal half of forewing, and in the absence of ochreous shades, the general appearance being thus quite different; also the middle line of forewing is not nearer the inner, more often, on the contrary, it is approximated to the outer line, especially below middle, where, in fact, all the markings are confused and difficult to follow. It stands in much the same relation to *subtrita* as the dark grey *confusa* does to *flexilinea*.

3 ♂♂, 1 ♀, the ♀ rather smaller.

107. *Myrioblephara subtrita* spec. nov.

*Forewing*: white, speckled and tinged in places with dark grey; the lines blackish; the median line nearer the inner than the outer, the greyish or ochreous grey shade that precedes the inner extended to the median, forming a dark fascia;

the costal half of wing between median line and outer prominently white; submarginal line wavy, white between two blackish shades; the ochreous or grey shade following outer line darkened into a blotch at middle, especially in the ♀♀, before the clear pale spot on the dark margin; cell-spot and marginal spots black; fringe white, with dark chequering.

*Hindwing*: white; with double antemedian and postmedian dark lines sinuous and parallel to each other; rest of wing as in forewing; all the markings above the median vein less clear than those below, as if blurred.

Underside pearly whitish, in forewing suffused with grey; the lines and cell-spots dark grey; a broad blackish marginal border, containing a small pale marginal spot at middle of both wings and at apex of forewing.

Head and thorax pale or dark grey, in the females blackish; abdomen white, with two middle segments dark grey.

Expanse of wings: 26 mm.

7 ♂♂, 7 ♀♀; the ♀♀ slighter smaller than the ♂♂.

#### 108. *Myrioblephara vivida* spec. nov. and ab. *brunnea* nov.

*Forewing*: whitish, slightly speckled with pale grey, the costa darker grey; first line at one-third, dark grey, slightly outbent at median, preceded by a very thick diffuse dark shade; outer line at two-thirds, outcurved to vein 2, where it is indented, thence vertical, followed by a thick grey shade; median line strongly outbent round the dark cell-spot and dentate below, as in *albipunctata*; submarginal line white, wavy between two dark grey shades; a distinct whitish patch on margin below middle; slight dark marginal spots; fringe mottled whitish and pale grey.

*Hindwing*: with the two arms of antemedian line thick and well separated, the outer arm nearly at middle and touching the cell-spot, both stopping short at the cell; inner line wavy, thick and double, approaching submarginal shades, which with the line itself are distinct.

Underside dull cinereous, with the markings distinct; marginal band broad, showing the four dark shades.

Head and thorax dark grey; abdomen grey with white rings; the basal segments whiter, with a black ring beyond metathorax.

Expanse of wings: 26 mm.

2 ♂♂, 2 ♀♀. Of these 1 ♂ must be separated as ab. *brunnea*; all the marking dark olive-brown on a creamy white ground.

#### 109. *Paradromulia anomala* Warr.

A long series, including both sexes of this species, from the Upper Aroa River, British New Guinea, proves it to be extraordinarily variable. I doubt if it can be kept distinct from the type species *ambigua* Warr. from Fergusson Island; while *nigrocellata* from Suer, Mefor, and *lignifuscia* from Guadalcanar and Ron Island, probably also *rufibrunnea* from Queensland, will have to be merged in it. Of the 66 specimens received 29 (17 ♂♂, 12 ♀♀) may be referred to the type-form; 3, all ♂♂, represent the ab. *rufigrisea*; while the rest form 7 new aberrations, quite distinct from any previously met with. It is worthy of note that, on the average, the ♀♀ are smaller than the ♂♂ in all the forms, and that they have a white apical spot on the underside of forewings.

Of the ab. *rufigrisea* there are three typical examples, all ♂♂. Of this form

ab. *albigrisea* nov.

is a development ; the brown tints of the basal and marginal areas are darker ; while the blue-grey of *rufigrisea* gives place to white or bluish white, densely black-speckled, which hue, instead of being restricted to the central area only, is extended below vein 4 to the hindmargin ; the cell-mark is a thick brown ring with pale centre.

5 ♂♂, 1 ♀.

ab. *lacteata* nov.

is a further development ; the black speckling is either quite absent or very scanty, and except the basal and apical patch of forewing and a slight anal shade the whole wing is bluish white, with the brown cell-mark conspicuous ; in the hindwing the whole basal half is white, and sometimes the marginal area below middle ; abdomen white, peppered with grey.

1 ♂, 2 ♀♀.

ab. *complicata* nov.

stands somewhat by itself. Here the three black lines and the inner black edge of the submarginal line stand out conspicuously from the ground-colour, which is reddish fawn in the ♂ and whitish, tinged with rufous, in the ♀, and these are crossed in both wings by black streaks from the cell-spot to hindmargin along vein 4.

1 ♂, 1 ♀.

ab. *variegata* nov.

In this the dark and light shades are most mixed up together. The forewing has the large black cell-mark followed by a whitish blotch before the dark blotch following the outer line below costa ; before the submarginal line in both wings there is a broader pale sinuous line from inner margins. The underside is much darker, and in this and other respects it approaches the ab. *nigrocellata* from Suer, Mefor.

All the examples, 5 in number, are ♀♀.

ab. *nigrosticta* nov.

This has the whole surface of both wings dark grey-brown, thickly dark-speckled, with no light markings except a fine submarginal line, the usual cross-lines indistinct, and marked only by black spots on veins ; but the large round cell-spots and the lunules preceding the submarginal line, with a subapical streak beyond it, are all conspicuously velvety black ; the basal segment of abdomen with a broad velvety black ring.

1 ♂, 1 ♀.

ab. *albimaculata* nov.

This form corresponds to the aberration from Fergusson Island called *maculata*, in which the anal blotches in both wings and an apical blotch in forewing are pale ochreous ; in the New Guinea form these blotches are white, and other white blotches are developed : one before first line near base, one below costa in the bend of the outer line, a curved fascia beyond first line, and the whole base of hindwing sometimes all in the same example. On the other hand, in two of the dark examples the white blotches at anal angles and apex, though present, are masked and obscured

by dark and partially confluent striae. In the darkest marked specimens the cell-spot is obscured ; where visible it appears as a large ocellus with pale centre ; but in two examples the discal mark is round and black, and these appear to form the transition to *ab. variegata*.

9 ♂♂, 4 ♀♀, of which 2 ♂♂ have the white markings masked, and 2 the cell-spots black and large.

*ab. uniformis* nov.

*Forewing* : dull grey-brown, without dark or light shades ; costa with yellowish striae, lines marked by black spots on veins ; submarginal line wavy, whitish, forming a broader, elongate mark at anal angle ; anal region with a few yellow striae ; fringe concolorous ; discal mark obsolete ; veins slightly dotted with yellow.

*Hindwing* : the same ; lines visible along inner margin.

Underside either wholly dull grey-brown, or with the basal half paler and large dull black cell-spots.

In one example the forewing is marked with a dull yellowish erect blotch on inner margin before submarginal line and a marginal yellowish blotch between veins 3 and 4, the lower part of submarginal line being plainer on both wings.

3 ♂♂.

110. *Paradromulia fuscimedia* spec. nov.

*Forewing* : whitish, tinged with pale sepia-brown and striated with fuscous ; the central area dark fuscous-brown ; the lines blackish ; first from one-third of costa, curved to near base of inner margin, generally interrupted below median ; outer line from three-fourths of costa, sinuous, to middle of inner margin, bluntly bent outwards at vein 4, sharply inwards at vein 2, thence vertical, approximated there to a median line which is slightly bent at middle ; all three lines from black costal spots ; outer line followed by a broad, dentate-edged, parallel dark sepia-brown fascia, the dark tint extending inwards as far as the median line, becoming diluted towards costa, where it generally reaches the inner line, and sometimes extends beyond it ; along the outer edge of this shade the white ground-colour stands out clear ; submarginal line whitish, obscure, the preceding lunular spaces partially filled up with pale brown, the two subcostal ones with dark fuscous ; marginal area deeper brown above vein 4, topped by an oblique black dash across vein 6 ; slight black marginal spots ; fringe pale brownish, chequered with paler, and darker tinged above vein 6 ; cell-spot obscured.

*Hindwing* : without first line ; a dark brown shade before submarginal line, becoming, like the central area, paler before costa ; cell-spot indistinctly ocelloid.

Underside dull whitish ochreous, shaded with pale brownish along costa and more broadly towards hindmargin, leaving the apex of forewing squarely pale ; the dark marks faintly shown ; cell-spots of both wings large, fuscous-brown with the discocellular pale ; fringes of hairs along veins of inner margin of hindwings all ochreous.

Face and palpi brown ; vertex, shoulders, and patagia ochreous, variously stained with darker ; the patagia with a brown middle bar ; abdomen cinereous ochreous, darker along dorsum ; tuft of hindtibia woolly, blackish grey.

Expanse of wings : 52 mm.

5 ♂♂.

111. *Paradromulia purpurea* spec. nov.

*Forewing*: brown with a purplish gloss, finely striated with darker; first line at one-fourth, angled on subcostal vein, then straight, nearly vertical, to inner margin, not curved inwards towards base, as in *ambigua* Warr., preceded by a dark, more diffuse, shade; outer line from three-fifths of costa, dentate-lunulate, marked darker on the veins, slightly bent outwards at vein 4, but not angled, nor sinuate below middle; middle line from costa near first line, passing through the black elongated cell-spot, below the middle parallel to outer line; between the cell-spot and outer line is a square deep fulvous spot; the shade following outer line is developed beneath costa into a triangular dark blotch stretching towards apex; submarginal line preceded by a dark shade, whitish and more conspicuous above inner margin; a square white apical blotch; a dark marginal festoon; fringe dark brown.

*Hindwing*: dull tawny; antemedian line straight, postmedian slightly curved, punctulate on veins, the shade beyond it stronger; a dark shade before submarginal line, the area beyond it more purplish; cell-spot annular.

Underside deep purplish grey, towards hindmargin darker, becoming purplish black on forewing before the snow-white apical spot, which is narrowed to vein 6; cell-spot of forewing very large, round, deep black, followed by a whitish space; of hindwing much smaller, oval.

Face brown above, ochreous below; palpi externally brown; vertex ochreous; antennae tawny, spotted with dark; thorax purplish cinereous; abdomen cinereous, purplish-tinged on basal segments.

Expanse of wings: 44 mm.

4 ♀♀.

112. *Paralcis laeta* spec. nov.

*Forewing*: bright yellowish ochreous; striae and markings black; a small black blotch at base of costa hardly reaching inner margin; a broad oblique curved fascia just beyond; a blotch at middle of costa, containing a pale linear mark on discocellular; a longer, more broken costal blotch at two-thirds, edged inwardly by a black line, and sinuate inwards below middle, accompanied by black striae and spots, to a larger blotch near middle of inner margin; submarginal line lunular, interrupted, preceded by a dark shade inwardly suffused with tawny, and forming at costa two black lunules; marginal area blackish, broadly interrupted at apex and between veins 3 and 4; black marginal lunules; fringe dark, except at apex and between veins 3 and 4.

*Hindwing*: basal half ochreous, with coarse black speckling and a black ocelloid cell-spot; an indistinctly double black postmedian line; the rest as in forewing.

Underside duller, with the markings reproduced.

Palpi ochreous, externally blackish; head, thorax, and abdomen pale ochreous, yellower in the ♂; the shoulders, patagia, and basal segments of abdomen speckled with black; foretibiae and -tarsi blackish with ochreous joints.

Expanse of wings: ♂, 39 mm.; ♀, 36 mm.

1 ♂, 1 ♀.

113. *Paralcis lithina* spec. nov.

*Forewing*: pale olive-ochreous, tinged with darker olive, along inner and hindmargin with slight dark speckling; first line black from one-fourth of costa,

sharply angled outwards on subcostal vein, then oblique and below median slightly wavy to inner margin at nearly one-third; preceded by a similarly angled shade within the angle of which is a spot of pale scales, semitransparent; outer line from four-fifths of costa to three-fifths of inner margin, slightly dentate on veins and parallel to hindmargin; the space between the lines in costal half paler; the median line marked by three black longitudinal streaks, one on costa, one on subcostal vein, and the third along vein 6, the last touching a second spot of pale scales also semitransparent, beneath this a round black spot between veins 2 and 3; outer line followed by a dark-edged olive fascia; submarginal line pale, lunulate-dentate and interrupted above vein 4, simple, broad, and uninterrupted below, the upper lunules filled up and followed by darker, the lower half followed by a dark line; a row of contiguous black marginal lunules: fringe olive, crenulate, with darker middle line.

*Hindwing*: tinged with pinkish; the base pale, followed by a diffuse black band, preceding the black cell-spot; outer line finely dentate, regularly curved; the submarginal preceded by a broad black shade from anal angle to vein 5, followed at anal angle by a short white line.

Underside pale ochreous, speckled with black, the veins yellowish; cell of forewing with a black spot at each end and a long velvety black streak between them touching the two semitransparent spots; traces of a diffuse brown median line towards inner margin of forewing and across basal area of hindwing, followed here by a round black cell-spot; marginal area of both wings beyond the dark crenulate outer line dark chocolate-brown, with the submarginal line showing whitish above inner margin and white-spotted towards costa; fringe brown.

Head and palpi black; collar brown; shoulders, patagia, and thorax pale ochreous, the shoulders in front velvety black, the patagia tinged with olive; abdomen reddish grey, marked with darker on segmental divisions.

Expanse of wings: 44 mm.

9 ♂♂, 8 ♀♀.

The ♀ is wholly dull olive, speckled with fuscous; the inner and outer lines very obscure, marked with black, and the submarginal pale; the costal, basal, and median are as of both wings sometimes slightly paler; the black band near base of hindwing distinct. Underside like the ♂, but without any black marks in cell.

#### 114. *Paralcis ocellata* spec. nov.

*Forewing*: whitish, tinged with olive-grey or olive-ochreous, thickly striated with darker; the lines fine, blackish, rising from dark costal spots; first from nearly one-third of costa oblique to near base of inner margin, angled below costa; outer line from two-thirds of costa to middle of inner margin, angled on vein 6, and irregularly dentate; median line more obscure, mostly parallel to outer; cell-spot white with greyish ochreous ring; the outer line is followed, as the inner is preceded, by a diffuse shade starting also from a dark costal spot; submarginal line wavy, whitish, the lunules partially filled up with dark; the marginal area with darker marks beyond cell, and interrupted by paler between veins 3 and 4; a fine black marginal festoon; fringe ochreous grey, with the base white between the veins, darker beyond them.

*Hindwing*: with a dark spot at base; the rest as in forewing, the ocelloid cell-spot placed on the edge of a darker shade and followed by a tawny streak towards margin. In the ♂ the whiter areas of the ♀ are all lost in the darker suffusion.

Underside whitish, tinged and striated with ochreous grey, without markings.

Head, thorax, and abdomen in ♀ whitish, in ♂ greyer, spotted with dark grey; palpi externally, a bar across middle of face, and the basal segment of abdomen darker; tufts of ♂ abdomen ochreous.

Expanse of wings: 30 mm.

1 ♂, 1 ♀.

115. *Paralcis pallidistriga* spec. nov.

*Forewing*: bright ochraceous, the ground-colour almost wholly obscured by deep purplish grey suffusion; the specklings and markings black; costa marked with close black striae and black spots at the origin of the lines; a short black mark close to base; inner line at one-fourth, rectangularly bent on subcostal, then vertical, twice curved, preceded by a similar but more diffuse shade; outer line dentate and sinuate at three-fifths; median line strongly outcurved towards outer line, and often united with it in a black blotch below middle, touching on the outside a large velvety black cell-spot, the space beyond it fulvous or ochreous, sometimes bright ochreous; a broad oblique band of ground-colour from apex to inner margin before anal angle, preceded on costa by a black blotch and followed below by obscure black contiguous lunules edged by the submarginal wavy line, which is sometimes ochraceous; marginal black spots; fringe, like the marginal area, purplish grey.

*Hindwing*: tinged with brownish or reddish; of the three lines the first is straight, distinct; the median diffuse, slightly sinuous, touching a pale-centred dark-edged cell-spot; the third marked by vein-spots; the rest as in forewing; inner margin and fringe ochreous.

Underside dull smoky grey, with faint indications of the paler and darker areas.

Head, thorax, and abdomen dark purplish grey, the abdomen becoming cinereous beyond middle; legs and abdomen beneath like underside of wings.

Expanse of wings: 42 mm.

21 ♂♂.

116. *Paralcis umbrilinea* spec. nov.

*Forewing*: olive-drab, darker speckled, in the ♀ with the underlying ground-colour whitish; the lines black, oblique, the shades also oblique, dark fuscous; first line from one-third of costa, projecting in cell, then obliquely curving inward to near base of inner margin, preceded by a broad dark grey cloud; outer line from two-thirds of costa irregularly oblique to middle of inner margin, dentate-lunulate, both teeth and lunules small; median line from a dark costal spot curved and obscure below costa, becoming plainer below middle, where it is followed by a fuscous shade; outer line followed by a broader, more developed dark shade, parallel with it, and with dentate edges; submarginal line pale, somewhat interrupted, preceded by dark lunules between veins 4 and 6 and followed by an oblique dark streak above 6; cell-spot indistinctly annular; a slight longitudinal streak of dark scales from below it to the submarginal line; black marginal spots between veins united by a fine black festooned line; fringe with a dark middle line.

*Hindwing*: similar, without basal line and shade; submarginal line and shade uninterrupted.

Underside of ♂ paler, with all the markings as above, but duller; of ♀ quite different: whitish with a faint olive tinge and speckled with dark; the lines fine and threadlike, very faint; a large round black cell-spot in forewing and an oval

one in hindwing ; marginal area of forewing blackish towards apex, leaving the apex itself white ; of hindwing smoky fuscous.

Head, thorax, and abdomen like wings ; face and palpi marked with brown ; tips of shoulders and patagia fuscous ; a black ring at base of abdomen ; the dorsal segments darker.

Expanse of wings : 48—52 mm.

4 ♂♂, 2 ♀♀.

In one of the ♂♂ vein 6 of both forewings is symmetrically forked from halfway to margin.

117. *Poecilalcis nigriscripta* spec. nov.

*Forewing* : snow-white ; lines and markings velvety black ; central fascia and hindmargin tinged with chocolate-brown ; basal area formed of small blotches of black scales, its edge projecting on submedian fold ; central fascia edged inwardly by an outwardly curved black line from one-fourth of costa to one-third of inner margin, outwardly by a sinuous black line from three-fifths of costa to three-fifths of inner margin, sinuate inwards towards inner edge on submedian fold ; its centre partially filled up with chocolate-brown, and with an obscure curved median shade ; the central space is preceded and followed by a broad pure white band ; the outer one is succeeded by a band of irregular black oblong blotches, joined to a black band consisting of a dependent costal blotch, a round one beyond cell, and an erect blotch from vein 3 to inner margin ; submarginal line white, broad towards costa, narrower and wavy below ; marginal area chocolate-brown, with a black blotch above middle ; a row of black marginal lunules between veins ; fringe chequered black and white.

*Hindwing* : pure white, sparsely dark-speckled along costa and hindmargin, with blackish cell-spot, traces of a cloudy submarginal line, containing a dark mark beyond cell, and marginal black spots ; fringe pure white.

Underside white ; forewing with costal spots and speckling black ; marginal area tinged towards apex with chocolate ; cell-spot and outer line at costa marked in black, the other markings showing through ; hindwing with cell-spots, marginal spots, and speckling black.

Palpi white, externally black ; face and vertex white ; antennae speckled black and white ; shoulders, patagia, and thorax white, blotched with black ; abdomen white ; legs black and white mottled ; pectus white ; forecoxae black at base.

Expanse of wings : 37 mm.

1 ♀.

Almost certainly a *Poecilalcis*.

118. *Zygoctenia albisparsa* Warr.

Of this species, described originally from Fergusson Island, a good series has been sent from New Guinea. *Zygoctenia singularis* Swinh., *Tr. E. S.* 1902. p. 620, also described from Fergusson Island, is a synonym.

SUBFAMILY SELIDOSEMINAE.

119. *Casbia albinotata* spec. nov. and ab. *profusa* nov.

*Forewing* : dark fawn-colour, covered with fine darker striae ; costa dark fuscous ; three outwardly oblique parallel brownish cross-lines ; the first at one-fourth, the second before the middle, the third at two-thirds ; the first quite straight,

the second, nearer first than third, slightly waved, the third sinuous; a small black cell-spot between second and third; submarginal line interrupted, represented by a brown curve from subcostal before apex to hindmargin at end of vein 6, and by a parallel curve below, across veins 4 and 3, slightly edged with white in the ♀, and more strongly in the type ♂, which also has a white apical streak; in the other ♂, ab. *profusa*, the apical blotch is enlarged and the lower curve followed by a large square white blotch reaching hindmargin, with smaller white spots above and below it; marginal black spots before fringe marked with white scales, especially in the aberration; in both ♂♂ the lower edge of the dark costal streak is dusted with white scales.

*Hindwing*: with two obscure curved lines, antemedian and median; the cell-spot white; submarginal marked along the curves by spots of white scales, in the aberration by a square white blotch as well, as in forewing.

Underside pale flesh-colour, the margins with a narrow dark grey shade and distinct black triangular marginal spots; costa and apex of forewing black-speckled; the cell-spot black.

Palpi ochreous; face black-brown; vertex greyer, as is the face in ♀; thorax and abdomen like wings; the shoulders darker in front; anal segments of ♂ pale ochreous.

Expanse of wings: 28 mm.

2 ♂♂, 1 ♀.

Very much like *Casbia rectoria* Wlk. from Australia, but certainly distinct; the fovea in forewing is not immediately below the cell, as Mr. Meyrick describes it in *rectoria*, but below the submedian vein, which is upbent round it, and I can see no fovea in the hindwing; the face is smoothly scaled; vein 11 free, not anastomosing with 12.

#### 120. *Oenoptila flavirupta* spec. nov.

*Forewing*: dull brown-red, black-speckled; costa narrowly pale in basal half; an irregular deep yellow patch beyond middle stretching from above vein 4 to below vein 2, containing brown-red striae and crossed by the Innulations of the outer line; the lines marked by vein-dots; the first at one-fourth, the dots with pale ends basewards; the outer at two-thirds, the pale ends outwards; across the yellow patch these white dashes are prolonged; cell-spot black; fringe concolorous.

*Hindwing*: without first line; the yellow patch small, at the base of veins 3 and 4, hardly reaching the spots of the outer line.

Underside deep yellow with dull brown-red margins, speckled and in forewing suffused with the same colour; cell-spots black.

Face and palpi deep brown; thorax and abdomen like wings; fillet and basal third of antennae white; underside of abdomen and legs yellow-ochreous; forelegs brown.

Expanse of wings: 42 mm.

1 ♀.

As in *vulpina* Warr. from the Solomon Islands, vein 11 anastomoses with 12 and 10 with 11 and 8, 9, and the species must be referred to the South American genus *Oenoptila*. The apex of forewing is subfalcate.

#### *Taxilepis* gen. nov.

*Forewing*: elongate; costa curved throughout; apex rectangular; hindmargin vertical to vein 5, protuberant from 5 to 3, then obliquely concave to vein 1.

*Hindwing* : hindmargin rounded, with an indentation beyond cell.

Abdomen of ♂ with anal tuft and a pair of lateral tufts beneath on penultimate segment ; metathorax tufted ? antennae simple, lamellate ; forehead protuberant ; palpi rough-scaled, erect in front of face, the second segment long, the third short, pointed, thrown forward ; tongue and frenulum present ; hindtibiae swollen, with a pencil of hairs and four spurs ; no fovea in forewing.

Neuration : forewing, cell quite half of wing ; discocellular vertically concave ; first median from before middle, second shortly before third ; radials normal ; 7, 8, 9 stalked from well before end of cell ; 10 and 11 long-stalked : hindwing with costal and subcostal approximated for one-half of cell ; 7 well before end of cell ; medians as in forewing ; no radial.

Wing-scales arranged throughout in long level lines ; scales of the body broad and coarse.

Type : *Taxilepis regularis* spec. nov.

#### 121. *Taxilepis regularis* spec. nov.

*Forewing* : pinkish ochreous, closely and regularly striated with fuscous ; all the veins pale ; the lines indicated by paler, unstriated bands of ground-colour ; the basal and marginal areas darker than the median ; basal area edged by two or three dark spots followed by paler striae forming a slight curve at one-third ; outer line beyond two-thirds, the paler ground-colour projecting as teeth on the veins into the dark marginal area ; a dark transverse cell-spot ; margin slightly darker before the fringe, which is pinkish ochreous at base, pinkish fuscous beyond, with dark marks beyond veins.

*Hindwing* : similar, but the lines less distinct.

Underside white, suffused throughout with pink, with darker speckling ; outer line dark, crenulate, with paler edge ; cell-spots and marginal spots black ; hindwing at base white, with the cell-spot and a broad antemedian band across wing of coarse black scales.

Palpi, face, vertex, and shoulders cream-colour, with a few dark scales intermixed ; the palpi externally fuscous ; patagia fuscous ; abdomen pinkish ochreous, with brown speckling ; traces of a red metathoracic tuft ; antennae yellowish, with white basal segment.

Expanse of wings : 26 mm.

1 ♂.

A species and genus without any near allies.

#### *Tolmera* gen. nov.

*Forewing* : narrow, elongate ; costa nearly straight, convex before the rounded apex ; hindmargin oblique, slightly curved.

*Hindwing* : narrow, both angles and hindmargin rounded ; the anal angle hardly marked.

Antennae of ♂ bipectinate, apical fifth simple, the pectinations diminishing gradually ; forehead prominent ; palpi large, obliquely porrect upwards, rough-haired, the basal segment distinct with pointed tip below, second segment rounded, third smooth, shortly spatulate ; tongue and frenulum well developed ; hindtibia swollen, with a large pencil of hairs and four spurs ; abdomen of ♂ elongate ; metathorax with a bifid tuft ; forewing with large round bladdery fovea above submedian vein.

Neuration : forewing, cell longer than half of wing ; discoellular vertically bi-concave ; first median just beyond one-half, second close before third ; radials normal ; 7, 8, 9 stalked from a little before end of cell ; 10, 11 free ; hindwing, costal and subcostal approximated for one-half of cell ; veins 3 and 7 from before ends of cell.

Type : *Tolmera albibasalis* spec. nov.

The genus is related to *Scionomia* and *Arctoseclia* ; in the large round fovea it agrees with the former, but is separated from both by the pectinated antennae of the ♂.

### 122. *Tolmera albibasalis* spec. nov.

*Forewing* : yellowish ochreous, speckled and suffused with fuscous, sometimes so thickly that only the veins and cross-markings remain pale ; costa with pale striae ; the two cross-lines white ; first at one-fourth, outcurved, and bent on submedian fold, passing just outside the fovea ; outer line sinuous, from two-thirds of costa to three-fourths of inner margin, strongly incurved on submedian fold towards first line ; this is followed shortly by a parallel, less distinct, ochreous yellowish line before a broad fuscous fascia formed of contiguous oblong blotches edged outwardly by an irregularly lunulate pale submarginal line ; all the veins yellowish ; vein 6 broadly so across the fuscous fascia, joining a pale oblique apical blotch, below which the marginal area is darker ; cell-spot large, blackish, round ; marginal spots large, black, triangular ; fringe yellowish, mottled with darker beyond the veins ; at base of wing below the costa is a crescentic silvery white spot running into the cell.

*Hindwing* : shining ochreous, mottled and tinged with grey ; a dark curved postmedian line edged with paler ; hindmargin darker, with traces of a waved submarginal line ; cell-spot dull grey ; fringe ochreous grey, mottled with fuscous.

Underside ochreous, thickly and coarsely mottled with dark fuscous ; the cell-spots, outer lines, and submarginal shades blackish fuscous.

Head, antennae, and thorax yellowish ochreous, mixed and mottled with olive-fuscous, the patagia and metathoracic tuft darker ; abdomen ochreous, unspotted ; abdomen beneath and legs thickly and coarsely spotted with fuscous.

Expanse of wings : 42 mm.

4 ♂♂.

### 123. *Trochistis carnecostata* spec. nov.

*Forewing* : pale fawn-colour, slightly pinkish-tinged, with very fine and sparse black atoms ; costa in the ♂ broadly flesh-colour ; in the ♀ simply the costal edge, and not always that, is flesh-colour ; three slightly darker, outwardly sloping, cross-lines, more or less parallel to one another ; the first at one-fourth, the second median touching the black cell-spot, the third at two-thirds ; this is followed by two superimposed spots on veins 3 and 4, yellow with red edges (in two of the ♀♀ these are almost wholly black), and obliquely above them on vein 6 a slight dark mark ; marginal spot small, black ; fringe concolorous.

*Hindwing* : with two lines only, both curved and parallel ; cell-spot black between them.

Underside cream-colour, black-speckled, and with black marginal spots ; costa of ♂ ochreous flesh-colour.

Head, antennae, and collar brown ; in the ♀ the collar is paler ; thorax and

abdomen like wings; shoulders paler pink: anal segment of ♂ abdomen ochreous; pectus and femora slightly woolly.

Expanse of wings: ♂, 37 mm.; ♀, 35 mm.

2 ♂♂, 3 ♀♀.

The forewing of the ♂ is narrower than that of the ♀.

#### 124. *Trochistis fulviplaga* spec. nov.

*Forewing*: brownish grey, with a slight reddish tinge and finely speckled with black; the costa pale grey, black-speckled, without any brown or reddish tinge; the inner and outer lines dark fuscous; the first close to base from one-sixth of costa to one-fourth of inner margin, bent on subcostal vein, then straight; outer from two-thirds of costa, below which it is inbent, straight and oblique to close before anal angle; median shade brown, sometimes bent in middle, generally nearer inner than outer line, followed by a narrow oval white cell-spot; outer line followed by two irregular fulvous orange patches one on each side of the median vein, sometimes bright and clear and edged with dark scales, sometimes indistinct and coalescent; often a similarly coloured patch on inner margin at base before first line; small black marginal dots; fringe rufous grey.

*Hindwing*: with only two lines, indistinct, and both irregularly waved; cell-spot white; fulvous patches as in forewings sometimes extended to anal angle.

Underside whitish ochreous, grey-speckled, with grey outer borders; outer line and costa of forewing also grey; marginal spots black.

Face brown; palpi, vertex, and antennae fuscous; thorax and abdomen rufous grey, like wings; anal segment whitish ochreous, blotched with dark grey.

Expanse of wings: ♂, 35 mm.; ♀, 30 mm.

12 ♂♂, 7 ♀♀.

The ♀♀ are rather paler than the ♂♂; the fulvous patches are sometimes very obscure; in one of the best preserved ♂♂ the white cell-mark of forewing is represented by a black line.

#### 125. *Trochistis scardamiata* Warr.

Of this species, described by me as a *Casbia* (Nov. Zool. v. p. 431), I have hitherto seen only ♀♀, the type specimen from Kei Island, and another from Milne Bay, New Guinea. 5 ♂♂ and 4 ♀♀ are now in the Tring Museum from the Upper Aroa River, British New Guinea, taken between January and April 1903, by A. S. Meek. The ♂♂ are on the average slightly larger than the ♀♀, with the markings somewhat more distinct, the main difference being in the discal spot of forewing, which is large and silvery white, with a small black dot on its lower edge; in the hindwing it remains as in the ♀, a small black dot in a silvery ring. The purplish marginal fascia of the underside is usually much less developed than in the ♀. Further, on the submedian fold of forewing near base there appears a small pale metallic dot, which is not visible in the ♀♀.

*Scardamia fasciata* Warr., Nov. Zool. iii. p. 296, described from Fergussou Island, and which also occurs in New Guinea, must be transferred to *Trochistis*.

#### SUBFAMILY SEMIOTIBSINAE.

##### *Euppe inferna* spec. nov.

*Forewing*: dull greyish slate-colour, striated with darker; the lines slightly darker, but obscure; the first, near base, marked only by spots on veins; the outer,

dentate-lunulate, from two-thirds of costa to three-fifths of inner margin, the tooth on vein 6 blacker and more sharply defined than the rest; submarginal line pale, wavy; slight traces of a median line; all the lines marked by black dashes on costa, which is spotted with pale ochreous; fringe whitish, mottled with grey beyond veins; cell-spot invisible.

*Hindwing*: like forewing, but without basal line; a distinct blackish cell-spot near base, preceding antemedian line.

Underside black, the basal half of hindwing purplish grey; the dark lines and cell-spot distinct on hindwing, just traceable on forewing; submarginal line marked with white below costa of forewing and towards costa and at middle of hindwing; fringe white.

Vertex, thorax, and abdomen like wings, the underside and legs also grey; face and palpi black.

Expanse of wings: 35 mm.

2 ♂♂.

### 127. *Hypophya plenimargo* spec. nov.

*Forewing*: pinkish ochreous in central field, the basal and marginal thirds covered with dark purple and olive fuscous scales, the lighter middle third with fuscous striae; the whole dark and light alike lustrous and scintillating; the edges of the dark portions are ragged and undefined, but near the inner edge of the marginal border can be traced a broad olive-brown line; costal edge with yellow spots in the dark portions, and dark in the light; cell-spot crescentic, deep yellow; fringe dark, beyond black marginal spots.

*Hindwing*: ochreous, clouded with smoky grey and with darker striae in basal half; the marginal half as in forewing, but without any distinct limiting shade; extreme base blackish; extreme hindmargin slightly paler; the whole spangled with lustrous scales.

Underside deep yellow to beyond middle; marginal area smoky black, the apex of forewing and hindmargin of hindwing slightly yellow; forewing below median vein with a cloud of grey striae from base to near middle; a dark spot on submedian vein and costa of hindwing just before middle.

Face and palpi black; collar grey-brown; thorax purplish black; abdomen cinereous: all with lustrous scales.

Expanse of wings: 42 mm.

1 ♀.

### 128. *Petrodava gibbosa* spec. nov. and ab. *rubra* nov. and ab. *intensa* nov.

♂. *Forewing*: pale olive, speckled with black, the lines and shades olive-rufous; first line at one-fourth, angled in cell, and again on vein 1; median line from beyond middle, angled on vein 6, then waved, to middle of inner margin; both these lines preceded by a shade of varying size and intensity; cell-spot small, blackish; outer line from three-fourths, bent above 6, to three-fourths of inner margin, slightly wavy, followed by a shade dentate outwardly, the teeth sometimes black-marked; fringe rufous, with pale tips.

*Hindwing*: without first line; the antemedian sinuous before the conspicuous black cell-spot; the postmedian curved, followed by a dentate-edged shade.

This is the palest and simplest form ; a second, ab. *rubra*, is wholly rufous instead of olive : in both there is sometimes a black blotch from costa to vein 6 in the postmedian shade of hindwing. Each of these paler forms is liable to intensification by the lines and shades darkening to deep fuscous or blackish, ab. *intensa*.

Underside of pale form yellow, tinged with reddish fulvous, and with the lines red ; of the dark form intensified by various shades of rich brown, red, and yellow. The ♀ is always darker and more strongly marked than the ♂.

Head, thorax, and abdomen in the pale form pale olive-ochreous, but varying according to the coloration of the wings ; sides of shoulders, base of costa, palpi, and pectus always bright red.

Expanse of wings : 40—44 mm.

21 ♂♂, 9 ♀♀.

Forewing with apex produced, subfalcate ; hindmargin strongly bowed at middle, especially in the ♀, where the apex is more produced and the hindmargin more deeply sinuate beneath ; hindwing truncate at apex ; hindmargin produced at vein 7, and crenulate, slightly in ♂, deeply in ♀ ; costal and subcostal veins of hindwing swollen at base into a kind of fovea ; cell of hindwing half the length of wing.

#### SUBFAMILY ENNOMINAE.

##### **Antarchia** gen. nov.

*Forewing* : elongate ; costa curved throughout ; apex slightly produced ; hindmargin sinuate.

*Hindwing* : triangular ; anal angle rectangular ; apex rounded ; hindmargin nearly straight.

Antennae simple, lamellate ; palpi upcurved, second segment thick, rough-haired, third short, pointed, deflexed. Tongue and frenulum present.

Neuration : forewing, cell one-third of wing ; discocellular vertically concave ; first median at two-thirds, second and third from end of cell ; radials normal ; 7, 8, 9 stalked from close before end, 10 just before them ; 11 out of 12, 10 anastomosing shortly with 11 : hindwing, costal shortly approximated to subcostal, veins 3 and 7 just before angles of cell ; no radial ; all the veins straight. Scaling fine and close.

Type : *Antarchia subrubescens* spec. nov.

##### 129. **Antarchia subrubescens** spec. nov.

*Forewing* : straw-colour, with a faint flesh-coloured tint along inner margin and a flesh-coloured submarginal shade distinct only towards anal angle ; fringe flesh-colour.

*Hindwing* : with the submarginal band complete and distinct throughout ; a slight flesh-coloured tinge towards hindmargin ; fringe deeper.

Underside flushed with pale rosy ; costa and apical area of forewing with sparse brown dots.

Palpi below red ; apex of second segment and the third blackish ; face black ; vertex and antennae brown ; thorax and abdomen like wings, abdomen pink-tinged towards anal segments ; pectus and forefemora dull rosy ; (legs broken).

Expanse of wings : 48 mm.

1 ♀.

130. *Capasa bifurcata* spec. nov.

*Forewing* : deep purple, with two brown lines becoming blackish on costa, as in *incensata* Wlk., but the outer line different; first line from near middle of costa, below which it is curved, to before middle of inner margin; the second from three-fourths of costa, at first running outwards, but bent and oblique to inner margin much sooner than in *incensata*, in which the outer line points direct to the apex, while here it is much more nearly parallel to hindmargin; the lines are wider apart on inner margin, and the green interval therefore broader; this green colour runs up along first line to middle of cell, ending in a sinuate tongue, the outer edge ending on vein 2; before the first line the cell is dull fulvous and the costa above it purplish.

*Hindwing* : with the central green band broad and sinuous, the costal and inner margin from it to base bright yellow.

Underside as in ♀♀ of *incensata*, but the purplish grey marginal border of forewing is uninterrupted; while in the hindwing it is restricted to a small blotch at apex and streak at anal angle.

Palpi, abdomen beneath, and all legs orange; face, thorax, and dorsum deep purple; vertex, collar, and antennae grey.

Expanse of wings : 39 mm.

1 ♀.

This ♀ came with a long series of the ordinary *incensata*; in size it corresponds with the ♂♂ of that species, the ♀♀ being in all cases larger; the six examples of ♀ *incensata* were all more or less worn, whereas the present specimen is quite fresh. Whether rightly a distinct species or an abnormal development of *incensata* must be left to future determination.

131. *Gonophaga straminea* spec. nov. and ab. *abrupta* nov. and *brunneata* nov.

*Forewing* : straw-colour, either quite pale, or washed with fulvous brown, and more or less speckled with fulvous; first line from one-third of costa, right-angled on the subcostal vein, vertical to submedian, then oblique inwards, marked by dark vein-spots, and often preceded by a brown shade; cell-spot annular; a slightly outcurved median shade below the cell-spot, rarely visible above it; an outer sinuous shade from two-thirds of costa, its lower half generally obscured, but, where visible, parallel to median shade; from three-fourths of costa a brown line obliquely curved outwards to vein 6, there sharply angled and oblique inwards to before middle of inner margin, becoming irregularly double below the angle, and widening, often ending in an oblong black-brown blotch, and crossing the lower parts of the median and outer lines; submarginal line waved, generally indistinct, but mostly ending at anal angle in an upright blackish blotch; marginal area always paler at the middle; a row of black spots between the veins before the margin.

*Hindwing* : with a brown straight basal line and another antemedian, passing inside the discal annulus, which is sometimes prominent; a dentate-lunulate curved postmedian line, and a brown pale-edged submarginal line running straight from anal angle to margin between veins 4 and 6, there bent to the end of vein 8, and generally interrupted into spots.

Underside pale straw-colour in basal half, heavily and coarsely speckled with brown; outer half grey-brown, with a bluish grey apical blotch, preceded by a pale

fulvous patch : the lines very variable in intensity ; the cell-spots always distinct, ringed with brown-black.

Head, thorax, and abdomen straw-colour, speckled with brown ; the shoulders always more or less brownish.

In some instances the marginal space beyond the oblique line of forewing, except at middle of hindmargin, and the space between basal and antemedian lines of hindwing, are overlaid with grey-brown or black-brown, and the middle segments of the abdomen are banded with the same colour ; this form, ab. *abrupta*, occurs in both sexes ; in the other form of the ♀, ab. *brunneata*, the whole of both wings is suffused with fulvous brown, the oblique line is very obscure, being represented only by dark spots on the veins, and the marginal area beyond the outer sinuous line is dark brown ; in these cases, as in most of the ♀♀, the submarginal line is more plainly marked.

Expanse of wings : 50 mm.

9 ♂♂, 11 ♀♀.

This and the following species differ from *G. albipuncta* and *subpulchra* Warr. in having the submarginal line of hindwing bent at the margin above vein 4, whereas in those species the same line runs straight from above anal angle to the end of vein 8. The ♂♂ of the present species are, moreover, structurally differentiated by the possession of a prominent lobe at the base of the inner margin of hindwing beyond a double semidiaphanous furrow.

In markings, coloration, and contrast between the sexes in the ordinary form they bear a great resemblance to *Anisographe dissimilis* Warr., from which the outline of the hindwing will at once separate them.

### 132. *Gonophaga subgriseata* spec. nov.

*Forewing* : greyish fawn-colour, speckled with blackish ; the costa with fine and short black striae ; a dark spot at base of cell ; first line strongly curved from one-fifth of costa to near base of inner margin, marked by black spots on veins and on the two folds ; outer line from quite four-fifths of costa, oblique outwards but very indistinct to vein 7, there bluntly angled, and sinuous inwards to before middle of inner margin, red-brown and double, the outer arm subdentate on veins, and followed by a grey parallel shade which is broadened to margin above vein 4 ; submarginal line much interrupted, represented by blackish wedge-shaped marks, plainest beyond cell and at submedian fold ; some black dots along margin between the veins ; cell-spot white, ringed with brown.

*Hindwing* : with a thick straight red-brown antemedian line, finely and semi-circularly curved inwards round the black-ringed white cell-spot ; a postmedian nearly straight, crenulated line followed by a grey shade ; a thick brown submarginal double line with paler centre from anal angle to hindmargin above vein 4, where there is a white spot in it, there bent and interrupted to apex at vein 8, the dark inner arm running straight to the tooth at vein 7.

Underside of both wings white, heavily speckled and striated with black to beyond middle, with a white dark-ringed cell-spot and thick red-brown median line not reaching either margin ; marginal area with a greyish fawn submarginal band preceded by a curved series of dark brown vein-spots and externally edged with darker ; the extreme margin, as well as apex and costal area, dove-grey.

Head, thorax, and abdomen pale grey ; base of shoulders darker ; a pair of dark spots on second dorsal segment ; legs pale grey, speckled with fuscous.

Expanse of wings : 52 mm.

1 ♀.

Distinguished from all the other species by the antennae of the ♀ being shortly bipectinate, the pectinations with an apical bristle.

133. *Gonophaga subpulchra* Warr., Nov. Zool. iv. p. 400.

The type, described from Mackay, Queensland, was a ♀, and till lately I had only seen one other example of the species, a ♂ from Sudest Island. Now, in the collection from the Upper Aroa River, British New Guinea, made by A. S. Meek, there come 6 ♀♀ and 1 ♂. The ♂ differs from the ♀ on the underside in having the whole outer area fawn-colour instead of dark brown, and in wanting the large white apical patch. Of the ♀♀ three are typical, the other three represent two distinct forms of aberration.

ab. *innotata* nov.

This form is without markings except the submarginal line of hindwing ; the other lines being replaced by obscure dots on veins.

1 ♀.

ab. *nigromaculata* nov.

This form develops a large velvety black blotch on inner margin of forewing at the base of the outer line.

2 ♀♀, one of which combines the characteristics of the two aberrations.

In the ♂ original description the upper half of hindmargin of forewing is said to be subcrenulate : it should be noted that the crenulation is very slight and confined to the end of vein 6. The antennae of the ♂ are shortly and evenly pectinated, with simple apex.

134. *Heterodisca ignea* spec. nov.

*Forewing* : fiery coppery, with blackish striae ; the lines exactly as in *H. scardamiata*, the first from one-fourth of costa to before middle of inner margin, the outer from five-sixths of costa to beyond middle of inner margin ; but, instead of the lustrous line, marked by black and white dashes on the veins, the white ends pointing inwards in the first and outwards in the second line ; cell-spot dark with a few pale scales inside ; no continuous marginal line, but slight marks of black white-dusted scales between the veins ; fringe concolorous, with conspicuous white chequering beyond veins.

*Hindwing* : similar ; the line central, marked with dashes only.

Underside smoky ochreous, washed with brown and freckled with grey ; the lines showing through ; the curved lines of dark spots, which are obscure above, here marked in black ; a streak of whitish scales to apex above vein 7 and the base of fringes white-scaled ; the white chequering more distinct.

Head, thorax, base of abdomen, pectus, and forefemora fiery red ; rest of abdomen violet with paler segmental rings ; hindlegs drab ; fore- and midtibiae and tarsi dark fuscous.

Expanse of wings : 40 mm.

1 ♂.

135. *Heteromiza robusta* spec. nov.

♂. *Forewing*: deep brick-red, slightly glossy, thickly speckled with dark atoms; the costa pale to middle; first line at one-fourth, indistinct, bent on subcostal, marked by small black and white dots on veins; outer line oblique from close before apex to three-fifths of inner margin, very deep red, outwardly edged with lustrous white; submarginal line dull lustrous, zigzag; fringe glossy pink; cell-spot black.

*Hindwing*: similar, without basal line, the oblique line central. In both wings the space preceding the oblique line is deeper red than the outer.

Underside uniform deep red; forewing with dark oblique line and a faint lustrous marginal shade; hindwing with the latter only; both wings with black cell-spots.

Face, palpi, and shoulders dull crimson; thorax and abdomen brown-red; anal segments paler, somewhat glossy; pectus, legs, and abdomen beneath crimson.

♀ with the red duller and browner; towards the costa and beyond the oblique line mixed with whitish and much more glossy. Underside of forewing with both lines marked, the oblique line narrowly double and the apex grey-black; hindwing with the line shown, and a curved crenulate line beyond it. Thorax and abdomen glossy pinkish grey.

Expanse of wings: 35 mm.

1♂, 1♀.

136. *Therapis pallidilinea* spec. nov.

*Forewing*: pale olive-grey, with slight dark dusting; the base of wing tinged with pinky brown; basal and median lines starting from costa as brown outwardly oblique streaks; the first from one-fourth of costa to one-fourth of inner margin, bent in cell and continued to inner margin as a whitish line, marked on the outside by blackish dots on the veins; median line very indistinct below the bend; outer line from three-fourths of costa to just beyond middle of inner margin, whitish, with dark dots on veins internally, bent below costa and above inner margin; marginal area beyond it and below vein 6 suffused with pinkish fulvous, or, in one instance, with dark brown and fuscous scales; submarginal line indicated below costa by two or three white lunules, preceded by fulvous blotches, indistinct below vein 6; fringe dark.

*Hindwing*: violet-grey, with a pink tinge; a dark straight antemedian line, continuing the median of forewing; a crenulate, paler edged, dark grey postmedian line; fringe dark brown; inner margin paler, with dark speckles and the lines dark.

Underside of forewing duller; the oblique outer line showing through only, but with a curved dark outer line parallel to the median, of which traces are apparent in the lower half of upperside; hindwing dove-grey, whiter towards inner margin and base, in one instance yellowish, speckled with brown, with the antemedian line to vein 6, the cell-spot, the postmedian line, and a shade beyond it, and a macular submarginal shade, all reddish brown.

Head, thorax, and abdomen olive-grey; the tops of shoulders, vertex of head, and face tinged with yellowish.

Expanse of wings: 39—42 mm.

3 ♀♀.

Agrees in venation with the type-species *Theraps evonymaria* Schiff. in wanting vein 10 of the forewing.

Along with the above 3 ♀♀ came a fourth, much smaller (30 mm. only) and very different in appearance, which at first sight seemed distinct, but which I prefer to describe as

ab. **notata** nov.

*Forewing*: pale bluish grey; the basal and median lines both distinct, brown and wavy; no distinct pale outer line, but its course can be traced, much more strongly sinuous than in the type-forms, by the series of brown vein-spots along its inner edge; before the white submarginal lunules is a thick chocolate-brown oblique streak from costa to vein 6, and the whole outer margin below it is filled with a roundish diffuse chocolate-brown patch; two marginal chocolate-brown lunules before the fringe in the subapical excision.

*Hindwing*: bluish grey, with the two lines somewhat obscure, the postmedian much nearer the hindmargin than in the typical form.

Underside of forewing dull, with only the costal and marginal areas blue-grey, and the three white subapical lunules distinct: hindwing blue-grey throughout, with all the usual markings chocolate-brown; some chocolate-brown marks on the middle segments of abdomen above.

SUBFAMILY PROSOPOLOPHINAE.

**Anosiodes** gen. nov.

*Forewing*: costa convex at base and before apex, faintly inflexed between; apex rounded; hindmargin nearly straight and vertical.

*Hindwing*: with both angles rounded; the hindmargin only slightly curved.

Antennae (♀) simple; palpi with second segment rough-haired, obliquely porrect upwards in front of face, third as long as second, smooth and slender, bent at an angle; tongue and frenulum present.

Venation: forewing, cell half as long as wing; discocellular, vertical, faintly inangulated; first median nervule at two-thirds, second shortly before third; radials normal; 10, 7, 8, 9 stalked from before angle of cell, 11 from cell, anastomosing strongly with 12, 10 with 11, and again with 8, 9: hindwing, costal and subcostal approximated for one-half of cell, both swollen at base; 7 before end of cell; medians as in forewing; no radial.

Type: *Anosiodes hybrida* spec. nov.

137. **Anosiodes hybrida** spec. nov.

*Forewing*: pale green, with purplish fuscous markings; those before the middle oblique outwards, those beyond oblique inwards; an oblique straggling streak from base of costa along submedian vein; a black streak along inner margin beneath submedian; a black sinuous lunulate line from near base retracted to one-third of inner margin; a broad bayd from costa before one-third to middle of inner margin, interrupted, except along its inner edge, below vein 2; beyond middle a broader band, narrowed and sinuous below median, linearly uniting with the inner edge of the preceding band on vein 2 and joining outer edge of the blotch on inner margin; the inwardly oblique pale band following is edged externally by a strongly

zigzag line, internally solid ; submarginal line slightly sinuous, interrupted between 3 and 4, preceded and followed by dark shades, the hindmargin becoming irregularly green ; fringe dark.

*Hindwing* : blackish, with six irregular fulvous yellow blotches, three on veins 6 and 7, the first at their origin, the third marginal, the second half-way between ; the other three similarly placed on veins 2, 3, and 4, the marginal one long and narrow.

Underside blackish ; forewing with a yellowish V-shaped mark at middle of costa, some yellow marks along hindmargin, and a  $\square$ -shaped yellow mark at apex, with black centre ; hindwing as above.

Palpi beneath yellow, apex of second segment and the third dark ; face yellow ; vertex fuscous ; collar greenish ; shoulders purplish in middle, edged with greenish ; patagia greenish in middle, edged with purplish ; thorax green ; abdomen cinereous ; legs fuscous, mottled with yellowish.

Expanse of wings : 39 mm.

1 ♀.

A species without apparent affinities, strongly suggestive of the *Noctuidae*.

#### **Phrudophleps** gen. nov.

*Forewing* : costa strongly curved at base, slightly at apex ; hindmargin deeply crenulate, somewhat prominent at vein 4, more oblique below ; inner margin fringed with broad-tipped hairs in basal half.

*Hindwing* : with rounded apex and hindmargin, the latter insinuate before anal angle, which is shortly squared.

Forehead rough-haired, with projecting tuft ; palpi with second segment rough-haired, obliquely upturned before face, terminal segment, long, smooth-scaled, porrect ; antennae (♀) thick, lamellate ; metathorax tufted ; tongue and frenulum present.

Neuration : forewing, cell half the length of wing ; discocellular vertically concave ; first median nervule just beyond one-half, second close before third ; lower radial absent, scarcely even represented by a fold, upper radial from upper end of cell ; 7, 8, 9 stalked from before end ; 10 and 11 long-stalked ; hindwing, costal and subcostal shortly approximated near base, 6, 7 long-stalked ; discocellular and medians as in forewing ; no radial.

Type : *Phrudophleps viridis* spec. nov.

#### 138. **Phrudophleps viridis** spec. nov.

*Forewing* : white, covered with bright green confluent striae which mostly obliterate the ground-colour ; costa with short dark green specks ; central fascia with the edges dentate-lunulate, darker, being mixed with blackish green, the lunules externally filled in with white ; inner edge at one-fourth, marked by a white costal spot, one between median and submedian veins, and a smaller one below ; outer edge at two-thirds, sinuate inwards below middle ; a large white spot on costa, beyond cell, and in submedian interval, with smaller dots between ; marginal area darkened at middle by a deep green shade, containing two white submarginal lunules below costa, above and below vein 7, and two marginal lunules above and below vein 3 ; dark green marginal lunules between veins ; fringe pale green, chequered with dark green beyond veins ; tips of the hair-scales of fringe along inner margin dark green ; cell-spot large and white.

*Hindwing*: whitish, washed with green; a broad light and dark green shade along hindmargin, the fringe being pale green; inner margin with a yellowish green tinge.

Underside whitish, green-tinged, with the markings showing through; marginal area greener, blackish green towards apex of forewing; hindwing more plainly mottled with green, and with a large blackish cell-spot and dark marginal spots preceded by whitish ones.

Head and thorax green, speckled with pale; terminal segment of palpi dark green; abdomen above ochreous, covered with olive-green scales, below deep green; all the legs green, pale-spotted; fore- and midtibiae and tarsi dark fuscous; antennae fuscous.

Expanse of wings: 26 mm.

1 ♀.

This is another species standing quite by itself.

## PRELIMINARY DIAGNOSIS OF A NEW GENUS AND SPECIES OF KANGAROO.

BY THE HON. W. ROTHSCHILD, PH.D.

### *Dendrodorcopsis* gen. nov.

This genus is closely allied to both *Dorcopsis* and *Dendrolagus*, and in many respects stands intermediate. It differs from both in its much more hairy rhinarium and very short claw to middle toe of hind-foot, which is concealed by the hair of the foot above and only exceeds the pad of the toe in length by 6 millimeters. The naked pad of hind-foot large, strongly rugose and extending up the back of hind-legs as in *Dendrolagus*. Hind-leg much longer than fore-leg, as in *Dorcopsis*. Tail considerably shorter than body, covered with short, flat, and straight hair as in *Macropus*. Mr. Oldfield Thomas has examined the skull of this curious new kangaroo, and finds that its essential generic characters (especially the absence of canine teeth) do not differ from those of true *Macropus*. This makes the genus much more interesting, as the external generic characters show almost conclusively that it is arboreal as well as rock-haunting in its habits, which facts would account for its modified outward resemblance to the Philanders and Tree-kangaroos, while it nevertheless retains the essential macropine cranial characters.

### *Dendrodorcopsis woodwardi* spec. nov.

Size larger than *Dendrolagus bennetti*, ears long and very hairy. Colour above and below sooty brownish black, fore-legs and lower half of hind-limbs and tail deep black. Total length 1530 mm. Tail 700 mm; head and body 830 mm.; hind-foot 250 mm.; ear 80 mm.

*Hab.* Granite Ranges, Head of South Alligator River (Type No. 170—1046, 17, v. 1903).

Collected by J. T. Tunney.